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FORTY DAYS WITHOUT FOOD!

A BIOGRAPHY

OF

HENRY S. TANNER, M. D.

INCLUDING A COMPLETE AND ACCURATE HISTORY OF

HIS WONDERFUL FASTS.

VIZ.:

42 DAYS IN MINNEAPOLIS, MINN., AND 40 DAYS IN NEW YORK CITY,

WITH

VALUABLE DEDUCTIONS.

BY

ROBERT A. GUNN, M. D.,

Professor of Surgery, and Dean of United States Medical College, Editor "Medical Tribune," Physician to Dr. Tanner during his New York Fast.

Rew york:

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New York City aug 7th 1880. Mes fra Albert Metz & Co.ly entlemen

I take pleas.

- we in informing you that
my Biography, including
the history of my fasts, wit.

- ten by Dr. R. A. Gum to be
published by you, is the anthentie, and the only edition
authorized by me.

16. S. James. 16. D.

The above letter was written by Dr. Tanner, on the last day of his fast

PREFACE.

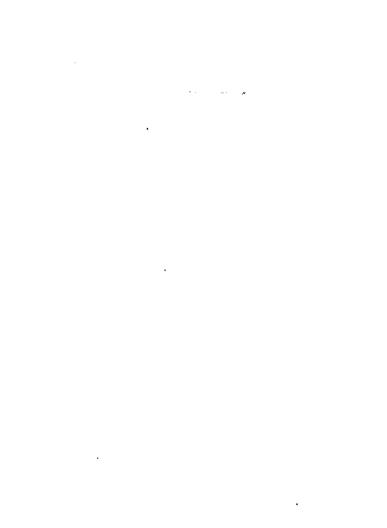
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It is not the purpose of the author to give a detailed scientific account of Dr. Tanner's Fasts in this little work, but rather to present to the public an authentic history of this wonderful man. Only such facts connected with the fasts as are of general interest, shall be presented, and the deductions drawn therefrom will be stated in such terms as can be understood by the general reader.

That much benefit will result from Dr. Tanner's successful experiment there can be no question, but we cannot, in so short a time, estimate the full value of all the lessons to be learned. The deductions thus far drawn are those that appear to be substantiated by the facts in the case, and all we hope, is to call public attention to the importance of knowing more of the subject of food, its uses and abuses.

ROBERT A. GUNN.

31 East 24th Street, New York, August.



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FORTY DAYS WITHOUT FOOD.

CHAPTER I.

BIOGRAPHICAL SKETCH.

It is not often that a man suddenly emerges from comparative obscurity and attracts the attention of all classes of people throughout the world. Yet, we find such an one in the person of Dr. Tanner, of Minneapolis, Minn., who completed his wonderful fast of forty days at 12 o'clock, noon, August 7th, 1880, under circr inner that rendered it impossible for him to have obtained food in any form without immediate detection.

This man came to New York City an entire stranger, and when he commenced his self-imposed task no one could be found willing to believe that he could accomplish it. He had not, however, gone many days before all who had closely observed him were thoroughly convinced that he was honestly endeavoring to perform his task. By his quiet, unassuming manner, and the manifestation of his indomitable will in his trying ordeal, he has won for himself a host of friends; and it is but natural that all are anxious to know more of his life and character.

Henry S. Tanner was born at Tunbridge Wells, County of Kent, England, on February 7th, 1831. His parents were well-to-do, and kept him attending the public school from his seventh to his fifteenth year, during which time he made efficient progress in all the branches comprised in a good common school education. After leaving school he

commenced to learn his trade, that of carriage making, and two years later, at the age of seventeen, he left England for America.

He landed in the United States in September, 1848, and went direct to Litchfield, Ohio, where he remained for several years working at his trade. From there he moved to Cleveland, Ohio, where he lived about three years. During these years he was a constant reader, and his tastes led him to read everything he could find on medical subjects. He then borrowed various medical works from physicians of his acquaintance, and finally he decided to commence the systematic study of medicine, which he did in 1856. During the three years following he applied himself diligently to his medical studies.

He had intended entering an allopathic college in the Fall of 1857, but was so impressed by the intolerance of the old-school societies, in their efforts to secure medical legislation at that time against so-called "irregular" physicians, that he changed his plans, and entered the Eclectic Medical Institute, of Cincinnati, Ohio. There he attended three full courses of lectures, and graduated as Doctor of Medicine, in the Spring of 1859. He had married previous to his studying medicine, and after his graduation he settled with his family in Hamden, Ohio, where he practiced his profession for two years.

At the outbreak of our civil war, he urged upon the citizens of Hamden to raise their quota of recruits without a draft, and he was among the first to enlist. He was assigned to the 41st Ohio Volunteers, but was soon detailed as hospital steward, in which capacity he served for eighteen months at Camp Chase, Ohio.

After his term of service had expired he returned to Hamden, but shortly afterward moved to Painesville, Ohio, where he practiced his profession for seven years. At the expiration of this time, his wife's health became impaired,

and she went to Duluth, Minn., for a change of climate. The doctor at the same time removed to Ridgeville, Ohio, where he practiced for a year and a half, and then joined his wife in Duluth. He practiced six months in Duluth, when his wife desired another change. They then went to Hudson, Wis., but after prospecting for a short time, the doctor decided not to locate there.

Leaving his wife in Hudson, he went to Minneapolis, Minn., in the Spring of 1870, and again commenced the practice of medicine. For reasons best known to themselves, and concerning which the public has no right to inquire, this separation has become a permanent one, and is the result of a mutual understanding.

During all the years of his practice, Dr. Tanner has been a close student and a careful observer, and his efforts at fasting have been made with the view of demonstrating the correctness of views he has long held regarding the various functions of the human body.

He held that too much importance was given to the action of food both in health and disease, and not enough to good air and water. He claimed that the electricity of the atmosphere was an important factor in sustaining animal life, and that many diseases could be more successfully treated by abstaining from food, than by drugs.

Holding these views, he not only advised patients to go without food, but on many occasions he had himself abstained entirely from eating for periods ranging from two to ten days, with the view of curing his own indispositions.

In 1877, while still practicing medicine in Minneapolis, he went forty-two days without eating, and in about two weeks afterward he attended to his business as usual. After this fast was completed, he gained considerable local notoriety through the newspaper reports of the same, and many cases of alleged long fasting came to his notice.

When the case of Miss Mollie Fancher was exciting public attention two years ago, Dr. Tanner read everything relating to it; and when Dr. Hammond's challenge to Miss Fancher was not accepted, Dr. Tanner offered to accept it as the champion of Miss Fancher. This led him to come to New York, and after he had tried in vain to commence his experiment under the direction of Dr. Hammond, he was forced to abandon that project. He then placed himself under the auspices of the Faculty of the United States Medical College, and commenced his second great fast in their rooms on June 28th, 1880, at 12 o'clock, noon.

For many years the doctor has restricted himself to a very plain and frugal diet. He does not drink tea, coffee, or liquors of any kind, and does not use tobacco in any form. He claims that every man would be stronger, healthier, and consequently, happier, by following his example in these particulars.

Dr. Tanner has also been a firm friend of liberal and progressive medicine. He is eclectic in the broadest and most comprehensive meaning of the term—always selecting such treatment as is most likely to cure disease without regard to the source from which it comes. He has been a strong opponent of unjust or one sided medical legislation, and has both written and spoken against all legislation that did not aim to elevate the profession above the bickerings and jealousies of rival schools.

In his religious belief he also claims to be eclectic. He believes in primitive Christianity as taught by Christ, and has little faith in "Churchianity." He believes in a personal God, and thinks that spirits have an existence beyond the grave, and that they have power to communicate with their friends on earth. He disavows all connection with or belief in modern spiritualism of the table-tipping, materializing kind.

In conversation with the reporters in regard to his religious beliefs, he said: "I am a man who reads the Bible or any thing else, and I draw my own conclusions. I don't ask any one to interpret for me; I do it for myself. These people who criticise me claim that if you once admit that there is any intercourse between this world and the spiritual realm, then you must be what they call a spiritualist. trouble is to get a definition of what people mean when they say 'spiritualism.' Old Adam Clark was a spiritualist; so was Dr. Johnson, the lexicographer. They believed in the intercourse between the two worlds. The Catholic Church believes in the communion of saints, and teaches it; but that does not go under the name of spiritualism. fore, when I stated I was not a spiritualist, I was sustained by the truth."

He makes no claim of receiving aid from superhuman powers, nor does he consider his fasting in the least miraculous. He simply claims that he has demonstrated the wonderful power of the will over the animal appetites, and that the power of man's physical endurance, without food, has heretofore been largely underestimated.

It would be difficult to find a man more thoroughly in earnest than Dr. Tanner is in his endeavor to demonstrate what he calls the "errors of physiology." And should he succeed in proving that many of the diseases, to which man is liable, are due to over-eating, he will certainly be the greatest benefactor to his race the world has ever known.

CHAPTER IL

TER KINNIAPOLIS PAST.

On the 15th day of July, 1877, Dr. Henry S. Tanner was called in consultation with Dr. A. Moyer, of Minneapolis, Minn., to attend a critical case that detained them late into the night. The next day Dr. Tanner felt quite indisposed and did not leave his room. During the day he drank a quart of milk, and on the following day (July 17th), a pint more. This was the last nourishment taken into his system until the evening of the 29th of August, a period of exactly six weeks. Early on the morning of the 18th, he was satisfied from his symptoms that he was suffering from a low gastric fever, which he believed was induced by an abrupt change in his mode of living, which had been unavoidable during the two previous weeks. This opinion was concurred in by Dr. Moyer.

Acting upon his previous custom, Dr. Tanner resolved to abstain entirely from food until the unfavorable stomach symptoms subsided. He occupied a room in Dr. Moyer's house, but was not at any time confined to his bed. For ten days he did not leave the house, and reclined on a lounge a greater part of the time. Neither did he take nourishment in any form, but drank freely of water when thirsty.

At the end of the ten days the symptoms of gastric fever had disappeared, and he began rapidly to improve. His countenance brightened, his eyes became clearer, and he seemed to gain in strength. According to his usual habit, he resumed his customary walk of from one to three miles twice a day, and his step became firm and steady.

During this time Dr. Moyer had frequently remonstrated

with him for pursuing what he deemed to be a suicidal course, but he persistently refused to take nourishment until he considered his stomach in a fit condition to receive it.

His appetite began to return after the first ten days, and he ordered some food to be brought to him with the view of breaking his fast. Instead of eating, however, he had resolved before the food was procured, to see how long he could go without, and thus demonstrate on his own person the effect of a prolonged fast. This resolve once taken, no amount of persuasion could induce him to discontinue his experiment till he had completed his forty-two days of entire abstinence from food.

The continuation of this wonderful test of human endurance can be best described by Dr. A. Moyer, who watched the faster during the entire forty-two days, and subsequently published the facts in the *Chicago Medical Times* of November, 1877, under the title of "Voluntary Starvation."

In describing the case, Dr. Moyer says.

"His custom was to arise at about six A. M., dress and look over the morning paper or some light reading for an hour or so, and then take his cane and a small glass and walk to a spring on the outskirts of the city, a distance of about one mile, drink a glass or two of water and then return leisurely to the office, occasionally prolonging his walk to three or four miles, repeating the same in the evening.

"In my frequent examinations I found the temperature normal; skin somewhat harsh and dry; tongue slightly furred; breath bad; pulse normal in frequency; cardiac impulse weak, becoming near the close of the experiment so much so that it was difficult to detect the pulse at the wrist; voice rather weak; mind clear, not able, however, to apply himself to any study requiring mental effort; urine rather less than usual in quantity, light colored, turbid, sp. gr. 1020, depositing an abundant whitish sediment, mostly earthy phosphates. He had no passage from the bowels from the day before the attack (15th July) until the 31st.

of August, a period of forty-seven days. The abdominal parietes were, toward the close, greatly "collapsed," so as to draw the chest and shoulders forward, giving him a "bent" appearance, as if the weight of half a century had suddenly fallen upon him. He complained of no inconvenience, however, except a disagreeable gnawing constricting sensation at the epigastrium, which he frequently endeavored to relieve by swallowing small bits of ice, but which stubbornly persisted, occasioning much annoyance.

"His powers of locomotion kept up wonderfully. He walked several miles every day, and on the twenty-ninth day walked down to Minnehaha Falls and back by way of the river, a distance of nine or ten miles, without suffering greatly from fatigue. Ont he thirty-eighth day he visited lakes Cedar and Calhoun, on foot, and remained out all day. It being quite warm he drank considerable cold water, from the effects of which, or the heat, or both combined, he was taken the following night with severe gastritis, followed the next and succeeding days by a good deal of retching and straining, and tendency to hiccough.

"The case continued without material change until the forty-first day, when I became alarmed at his condition, and strenuously urged him to endeavor to allay the gastric irritation by taking considerable quantities of milk and allowing it to be thrown up. This, towards evening, he consented to do, and swallowed three or four times during the evening, a small glass—it being retained, however, but a few minutes each time—yet it served to quiet the irritation and

he rested very well during the night.

"The next forenoon he ate a cracker with a glass of lemonade, but it was rejected by the stomach in a short time. Toward evening, however, small quantities of milk were retained, and in the evening he procured a piece of rare beefsteak which he chewed, swallowing the juice with evident relish. The next morning I found him taking his milk in frequently repeated doses and increasing quantities, which he continued throughout the day. In fact his appetite had already become unappeasable, and in the afternoon, although he was taking large quantities at short intervals, he protested that he got no sense of fullness or repletion, that it was simply like "pouring it down a rat-hole;" the more he drank the more he wanted; the hungry system seeming to

direct and assimilate it almost instantaneously. About nine o'clock in the evening, having exhausted his supply of milk, he went out, saying he would go down to the Market House, drink another pint, and then go to bed. Coming in some half an hour later, he said, with a half scared expression in his face, "Well, Doctor, I think I have finished up this business now, for good," and then told me that when down in the market, he found his appetite perfectly ravenous and uncontrollable, and, therefore, had not only drank his pint of milk, but had eaten five California pears, and half a good sized watermelon. Well, I concurred with him in thinking we should certainly have business before morning. But, strange to say, he suffered no inconvenience from it whatever, and from this time on during the succeeding three or four weeks, the amount of "provisions" he "put out of sight," was wonderful; he frequently said, he thought that when he was going a month and a half without having to pay anything out for board, he was practising unusual economy, but was satisfied now that it was money out of pocket.

"I will add in conclusion, that when I saw him last—some ten days ago—he had entirely regained his usual strength and rotund proportions, was feeling exceedingly well, and remarked that had it not been for the unfortunate attack of gastritis—for which he blames himself—he could, for anything he could see to the contrary, have gone on, at least a couple weeks longer, without serious result."

During this fast no record was kept of his loss of weight, the quantity of water drank, nor of the urine voided, and consequently the scientific data furnished is very meagre. But it must be remembered that the fast was commenced with a view of curing an inflammation of the stomach, and continued for the purpose of testing how far scientific teachings were correct in the estimation of the time a person could live without food. No previous plan for commencing a fast had been arranged, and no thought of such a test occurred to the doctor till he had cured his stomach trouble by fasting ten days. Neither had he any intention of making the fact of his fasting known to the public.

Some weeks after the fast was concluded, the few persons who had heard of it through Dr. Moyer began to speak of it, and finally Dr. Moyer made a statement of the facts, which was published in the *Minneapolis Pioneer Press*. This called public attention to Dr. Tanner, and the papers were soon filled with letters and interviews, many of which were intended to throw doubt on the doctor's veracity. As a rule, medical men declared such a fast to be an impossibility, and published their statements as scientific facts.

These attacks on his veracity, the doctor believed likely to affect his professional reputation, and now for the first time he resolved to speak for himself. He first visited the office of the *Pioneer I'ress* and made a statement regarding his fast, which was substantially the same as that given above. A few days later he sent a communication to the same paper, from which the following is abstracted:

"Since Dr. Moyer's statement has been given to the public, I have been the recipient of letters of inquiry from all parts of the country, besides having interviews with innumerable skeptics, and from all I learn that my statement of facts is not disputed on merely personal grounds, but is dismissed as unworthy of credence on the ground that 'unless the days of miracles are still with us,' such a fast is a physical impossibility. This hastily-formed conclusion places me in a very unenviable position, both in and out of the profession. This unwarranted assumption reflects upon my honor both as a man and a physician, and as I am desirous of retaining my good name (which to my knowledge has never been called in question, professionally or otherwise), I ask the privilege through the columns of your paper of vindicating my claim, not only to truthfulness in the statement of facts, but also to integrity of purpose in voluntarily abstaining from food for six weeks, which painful experience was undertaken not for notoriety, not for money, not to strike 'a terrible blow at boardinghouses,' but solely in the interests of sick and suffering humanity.

"As the facts in the case were first given to the public rough your paper without my knowledge or consent, I

feel that a favorable response to my request would be only an act of simple justice. Presuming on your well-known liberality in this direction, without further preliminary or apology, I hasten to the consideration of the disputed points in my statement which have caused so many to 'doubt the truth of it.'

"The task before me is to negative (if possible) the hypothesis laid down by my professional brethren and others, that a total abstinence from food for forty-two days, without a suspension of the vital principle, is an impossibility.

"If I succeed in this, the question of veracity involved in the decision can, I think, be easily and satisfactorily

solved.

"I start out with the assertion that this oft-repeated statement of 'impossibility' rests on no firmer basis than mere assumption, as I well know by forty-two days' painful experience. This assertion, however, I am well aware will have but little weight with an incredulous public. Something more than a reiteration of my former statement is demanded, and happily I am not restricted to such narrow limits, or to such evidence as will serve only to establish a probability that forty-two-day fasts are possible. My recent experience is not an isolated one. We have a number of well authenticated cases of like character on record.

"The first notable case on record is one Jesus of Nazareth, who fasted forty days and forty nights in the wilder-

ness.

"The experience of the humble Nazarene (although generally admitted by the Christian world), it is claimed, is not admissible as evidence of the possibility of a similar

occurrence in this day and generation.

"Jesus was more than man. He was divine. His experience was a miracle; so say his followers. Without stopping to discuss the disputed and disputable question of Christ's divinity, miracles, etc.; without stopping to inquire into the significance of the words of this great and good man: 'Greater works than these shall ye do;' without stopping to notice the objections of the caviling skeptic that this alleged fact was not an actual occurrence—that this Jesus is a mythical character, and the New Testament record wholly traditional, and therefore worthless and unreliable. I come at once to our own time and to more analysis.

able and satisfactory examples. Dr. D'Unger in his communication cites a well authenticated case of a convict who stubbornly refused food for sixty-three days, and who remained in good health on a plentiful supply of water.

"The case of Mrs. Dr. Smith, of Minneapolis, reported by Dr. Phillips, of that city, has been given to the public. It is, however, objected to as evidence, on the ground that there was not a total abstinence. Yet I think a fifty-seven day's fast, with no other nutriment than 'gum Arabic water,' furnishes strong presumptive evidence that fortytwo days' total abstinence from food is possible. I might refer to other notable cases which present strong presumptive evidence of man's powers of endurance under prolonged fasting and hardship. The case of Dr. Kane, the Arctic explorer, and also of John C. Fremont, in his Rocky Mountain explorations, might be cited with this view. But I prefer to call the attention of your readers to facts that come under more general observation, and which present positive evidence that animal life can be (and is) prolonged, not for weeks only, but for months, without food. In the hibernations of cold-blooded reptiles and certain superior forms of animated nature, we have abundant evidence to support the assumption that total abstinence from food for many months does not involve the total extinction of the vital principle."

After enumerating a number of other cases that are vouched for by reputable and trustworthy persons, and discussing the question from a physiological stand-point, he concludes his communication as follows:

"I would be glad if all could be satisfied with the truth of my statement; but there is not the remotest probability that a unanimity of sentiment on this disputed point can be arrived at.

"If this reiteration of my former statement, with the facts and evidence herewith adduced in support of its being a possibility, fails to satisfy my friend 'Skeptic,' and others of his class, who have pronounced a fast of forty-two days 'impossible,' then there is but one course left me to pursue.

"My self-respect forbids me to quietly submit to the odium that an unjust, unreasoning skepticism has reflected on my good name. If possible I would avoid even a sus-

picion of fraud, imposture or deception. I am well aware that the cloud of suspicion is resting heavily upon me. It has destroyed the confidence of many whose friendship I valued highly, as to my integrity. I see but one way to restore that confidence, and that is to accept the proposition of 'Skeptic' to repeat the experiment under conditions that shall leave no room for the remotest possibility of I will accept 'Skeptic's' proposition conditionally. I am not disposed to play the harlequin for the world's amusement or to gratify an idle curiosity. I do not propose to set myself up for a target for the ridicule and sneers of a 'scoffing and skeptical world,' neither shall I do so unless my proposition is accepted. I am asked to repeat the experiment under strict test conditions. This I am perfectly willing to do, but I am not willing to pass through this trying ordeal simply for fame. I have no desire to be the best advertised man in America.' Neither am I ambitious for such notoriety as Beecher and Tilton have My aim in life is not wealth, worldly honor, or attained. worldly distinction. My highest ambition is, and I hope ever will be, to be a man in the strictest sense of that term. I desire to live up to my highest convictions of right, and to be as was my great Elder Brother, the embodiment of the religion I profess.

"My proposition is as follows: I will repeat the experiment under the strictest surveillance, for the sum of five thousand dollars, the amount to be raised and deposited in any reliable bank in Minneapolis or St. Paul. If I succeed in totally abstaining from food for forty days, one thousand dollars shall be subject to my order at the expiration of the time allotted to the experiment; the remaining four thousand shall be subject to the order of that practical Christian philanthropist, Mrs. Gen. Van Cleve, matron of the House of Refuge of Minneapolis, to be by her appropriated in such a way as shall best aid her in her noble and laudable endeavors to reclaim the unfortunate of her sex. If I fail in totally abstaining from food for the time specified, then all claim on the money shall be forfeited in whole or in parts. In such event, the amount shall constitute a poor fund to be distributed for charitable purposes as properly selected committees shall direct.

"Now, Mr. Skeptic, here is an opportunity for yourself

and skeptical friends to probe this matter to the bottom, under test conditions and at the same time confer a great and lasting good upon the poor and needy. There are no doubt ten thousand skeptics in Ramsey and Hennepin Counties, who, like yourself, have rejected my statement on the ground of its being an impossibility. Fifty cents subscribed by each will secure the necessary amount to test the matter beyond the possibility of doubt. This is my general proposition. Mr. Skeptic, if you are sufficiently interested in the matter to make the necessary effort to raise the funds, the details can be hereafter considered and satisfactorily arranged. I am not at all anxious to again pass through this trying ordeal. My last experiment consumed at least three months of my time, (and time with me is money), saying nothing about the discomfort. Skeptic asserts that I speak 'of the occurrence nonchalantly, as though it was of no particular consequence,' (that language, although quoted as such, is not mine), and he presumes on this nonchalance, that I will be only too willing to accept his proposition. In a slightly flippant tone he adds 'suppose, as it is so easy, he repeats the fast,' etc.

"Whether 'Skeptic' is one among the many hundreds that has interviewed me on this matter I know not. If he is, and referred from my remarks that I considered my experience as 'of no particular consequence,' and accompanied with no personal discomfort, he has utterly failed to com-

prehend my meaning.

"Had I gone into all the details of my experiment to every person that has thus far interviewed me, my whole time would have been spent in the unprofitable task of going over and over the ground for no other purpose than to gratify an idle curiosity.

"To all inquiries as to the amount of suffering such an experiment involved, I have in nearly all cases made answer 'that I had suffered more from a superabundance of

food, than for the want of it.'

"Skeptic must be well informed as to the amount of discomfort I have experienced from dyspepsia before he can legitimately infer from such a remark that I 'regarded my experience as of no consequence.'

"With this explanation, if Skeptic thinks the large sum I have named evidence of insincerity on my part, equivalent to a virtual refusal to accept his proposition, if he doubts my sincerity because I decline to accept his proposition to repeat the experiment simply for notoriety, let him try the experiment on himself; this will qualify him to judge whether the proposal I have made him is within the bounds of reason."

For some time after the publication of this communication, a considerable interest was manifested throughout the West, on the subject of fasting, and Dr. Tanner's name became extensively known. The papers were filled with reports of cases of protracted fasts, and Dr. Tanner daily received letters from persons who had gone long periods without food, and from physicians who had met with such cases. From a careful examination of these reports, the doctor became satisfied that many of them were authentic, and at various times published accounts of the most interesting in the Minneapolis papers. These were extensively copied, and the literature of fasting became as familiar to the public as it was interesting. A few believed in the truth of these reports, but the majority doubted, and none were willing to undergo the test for themselves.

Finally the interest began to die out, and the doctor continued his practice as before, till he again came prominently into notice through his controversy with Dr. Hammond, which grew out of Hammond's challenge to Miss Fancher to fast thirty days under his supervision, and to be watched by members of the Neurological Society.

CHAPTER III.

THE HAMMOND CONTROVERSY.

During the months of October and November, 1878, public attention was directed through newspaper reports, to the case of Miss Mollie Fancher of Brooklyn, N.Y., who was said to have lived fourteen years without food, and to be possessed of wonderful clairvoyant powers. It was not strange that such a wonderful case should excite great interest among all classes of people, and thousands were willing to accept the statements of Miss Fancher's physicians as true, while others claimed that such things were impossible.

Among the latter class was Dr. Wm. A. Hammond, who according to his usual custom, and without any effort at investigation, raised the cry of "fraud." He eagerly embraced this opportunity of bringing himself before the publie, and seemed to take special delight in being interviewed by representatives of the press, in relation to the subject. When he could no longer keep up the "interview" method of advertising, he adopted another plan. He published in the New York Herald two challenges to Miss Fancher, one to test her clairvoyant powers, and the other to go without food for thirty days. Many of his professional brethren believed at the time that these offers were not made in good faith, and subsequent events prove they were correct in their estimates of the man. These challenges were subsequently published by Dr. Hammond as an appendix to his work on "Fasting Girls;" and as one of them plays an important part in this controversy, we deem it important to quote it in It reads as follows:

"A word further in regard to this last matter. I know something about 'fasting girls' and their frauds, not excepting the sad case of poor little Sarah Jacobs. But I will make this additional proposition:—If Miss Fancher will allow herself to be watched day and night, for one month, by relays of members of the New York Neurological Society, I will give her \$1,000 if at the end of that month she has not in the meantime taken food voluntarily, or as a forced measure to save her from dying of starvation, the danger of this last contingency to be judged of by her family physician, Dr. Spier. These offers to remain open for acceptance till twelve o'clock M., December 31st. If not taken up in that time, let us hear no more in support of Miss Fancher's mind-reading, or clairvoyance, or living for a dozen or more years without food.

"WILLIAM A. HAMMOND, M. D.

"New York, Dec. 12th, 1878."

Before making the above proposition, Dr. Hammond knew that Miss Fancher was very sensitive about her condition, and shrank from all efforts to make the facts of her case known to the public. She and her relatives even objected to having their friends bring persons to see her, who were in sympathy with her. Under these circumstances, in connection with the fact that they were not in need of money, no reasonable person would for a moment suppose that such an offer as Dr. Hammond's would be entertained, even if Miss Fancher confidently believed she could go through with the test.

As we have nothing to do with Miss Fancher's case, we shall not discuss it here. Justice, however, demands that the claims made in her behalf should be correctly stated. It was never claimed for her that she went fourteen years without food; but, that during those fourteen years she often went long periods of time without taking any kind of nourishment.

At the time Dr. Hammond issued the challenge to Miss Fancher, Dr. Tanner had made his experiment of going forty-two days without food; and knowing that Miss Fancher would not accept the challenge, he wrote a personal letter to Dr. Hammond, offering himself as her substitute. After waiting for some time, and getting no answer to his letter, Dr. Tanner wrote to Prof. Joseph R. Buchenen.

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Finding that Dr. Hammond failed to notice his personal person and that of Dr. Buchanan. Dr. Linner respired to saes als ider inniisis, suich ie fid incourt me columns of the Pomper Press, and remediately sent Dr. Hammand a day of the paper. The doctor this not desire to get the VIMAL and the verify his statements regarding his other had. He offered to pay his own expenses in full and was waiting to class himself under the supervision of the Neutransport Society. Dr. Hammond, or such persons as they might might. After the publication of Dr. Tanner's offer, a reporter of the New York Times waited on Dr. Hammunul, and, if correctly reported, he at that time denied having offered Miss Fancher \$1,000 to go without food for thirty days. He, however, said to the reporter, "You can publish me as saying that I will gladly accept Dr. Tanner's proposition."

In. Tanner, on seeing the account of the above interview in the Times, at once wrote to Dr. Hammond with the view of bringing about the necessary arrangements for the experiment. He also wrote a long and interesting letter to the Num York Times, which appeared in that paper on the inih day of January, 1880. As this letter plays an important part in this controversy, we here quote it in full:

"To the Editor of the New York Times:

"Dr. Hammond's answer to my proposal, as given to your reporter, is before me. He denies making any offer to Miss Fancher to test her fasting powers. I have no trustworthy data at hand to disprove this statement. but this much I do know, that the New York journals reported the proposition as follows: 'Dr. Hammond, with a sealed envelope in his hand, containing a check for \$1,000, proposed to go into the presence of the blind girl. If she succeeded in giving him the number, date, signature, and name of the bank, the check should be signed over to her. test her fasting powers he proposed to deposit another \$1,000 in bank. If the girl succeeded in entirely abstaining from food for a period of thirty days under the supervision of members of the New York Neurological Society, the amount deposited in bank should be subject to her order.' Dr. Hammond denies making this proposal; but if the papers reported incorrectly, why did he not correct them at the time? He now says that 'he never claimed that it was impossible for a human being to live thirty days without food.' If the object in view in offering \$1,000 was not to test the powers of endurance under prolonged fasting, then he must have expected from the physiological, pathological and psychological phenomena developed to have garnered some new and important facts into the storehouse of medical knowledge. I am a student of vital chemistry, but not after the methods of the modern schools of medicine. I have the proper credentials that entitle me to the name and immunities of the profession. Yet I long since broke loose from the arbitrary restraints of the Code of Ethics laid down by the American Medical Association. Believing Dr. Hammond to be actuated in his offer to Miss Fancher by a desire to learn more of the science of life and the laws that govern it, and desiring further light in this direction myself, I was led to make a proposal to him, supposing it vould at least receive respectful attention. The proposition to turn me over to the management of a score or more of raw medical students, and to confine me during the test vithin the walls of a medical college, the atmosphere of hich would necessarily be reeking with the poison of a ozen or more decomposing cadavers, has convinced me nat I am mistaken in my estimate of the man and the object in view in making his proposal. It is unnecessary to say that I decline to accept the proposal as given to your reporter, for the conditions are such as to preclude all hope of success.

"In the interview with your reporter, Dr. Hammond is published as saying: 'But as to denying anything in nature outside of mathematics, I certainly mean to be more cautions than to even deny the possibility of a man's living a whole year without food, no matter how improbable such a thing is.' Had he stuck to his text, he would not have committed himself as he did a moment later, when he denied the possibility of a thirty-days' fast being successfully carried out, if the test included abstinence from water. 'People,' says he, 'have lived without water ten or twelve days, not longer.' I beg leave to differ. Dr. Stewart, of Philadelphia, reported to the Philadelphia Times within a year, the case of Levi Waggenseller, an employee in Wood's cotton factory, who lived seven weeks without swallowing a mouthful of food or a drop of water or any other fluid. Cause, swallowing a set of false teeth, which lodged about an inch and a half above the entrance to the stomach, completely closing the œsophagus. I have also on record the case of Mrs. Norton, a lady forty-five years of age, who lived thirty-two days without swallowing a morsel of food or a drop of water. This woman lived in the village of Bone Centre, Orleans county, N. Y. I can give particulars, if required. Within a year, Dr. Wiesman, of Keokuk, Iowa, reported to the Dubuque Herald the case of Conrad Knapp, an employee in the Keokuk and Des Moines Car Shops, at Keokuk, which is another case in point. The Doctor reported this man as not having had twenty-four hours' sleep in six weeks. For the last three consecutive weeks he had totally abstained from food, and for the last fourteen consecutive days had totally abstained from water or other fluids. The article closes by saying that every conceivable means has been used to induce him to take food, sip water, or take medicine, but all without avail; he is immovable in his purpose to starve himself to death. This man, at the time of the report, was still alive, with a prospect of living several days.

"Mollie Fancher's case is not an isolated one; it is not the only one on record where life has been sustained for months

and years without food and drink. I have learned of two cases similar in character in Canada, Province of Quebec. One is a girl, the other a boy. The girl is reported as having totally abstained from food or drink for nineteen years: the boy seven years. It is stated on good authority that the girl (yet alive) has kept neither solids nor fluids on her stomach for the period above mentioned. She can swallow. but not a morsel of food or a drop of water can be retained The most delicate tests that could be for a second of time. devised have been brought into requisition to ascertain if any particle of food or drink was retained in the stomach, but, so far as human ingenuity can detect, not an atom of either is absorbed. The case of the boy (brother of the girl) is the same, differing only in point of time. Both were poisoned at the same time by medicines administered by mis-The boy overcame the disease after seven years of total abstinence from food. The vomiting was so persistent in both cases that all attempts to introduce food or water into the stomach have often been abandoned for weeks at a time. On one occasion neither food nor water was taken into the presence of the boy for a period of six weeks. Both the boy and the girl, like Mollie Fancher, were bedridden for a number of years. The boy is now dead; the girl still lives—on what, is the question for the savants to decide, if they can. By referring to Dr. Powers, of Eaton Corners, Canada East, Province of Quebec, or to William Brown, of the same place, full particulars can be gained.

"That animal life can be, and is sustained without water, for a longer period than two days, we have abundant evidence in the hibernating habits of the lower order of animals. It is a well established fact, placed beyond the possibility of doubt or cavil, that hibernating animals do exist for months and years in a condition of suspended anima-

tion, deprived of air, food and water.

"Who in the face of these facts, dare affirm that man—the crowning glory of God's creations—is incapable of such an experience? At the risk of being charged of letting my imagination to take flight into speculative realms, I declare it as my firm belief, that it is not impossible for human beings, peculiarly constituted, and under favorable conditions, to hibernate like the lower order of animals, deprived of air, water and food, and buried six feet under

ground withal. I take the position, and propose to maintain it to the best of my ability, that the condition called trance, (so common in this age) is identical with the condition of the lower order of animals during their winter repose. If the hypothesis I have laid down (that man is capable of like experience) has any basis in fact, is it so very wonderful that Mollie Fancher should remain in a condition of suspended animation for ten months, deprived of air, food and water, and at the end of that time awaken again to life and its enjoyments? One is no more marvelous than the other. Both men and animals are subject to the same

great law, and the result is the same in both cases.

"Drs. Hammond and Beard (the great high-priests of inductive philosophy) say these things cannot be. But how impotent are all their conclusions when brought face to face with facts, like the following: The Richmond (Va.) Telegram, of Dec. 10, 1879, reports the case of a girl who has just awakened from six months' hibernation or trance. This wonderful occurrence was telegraphed all over the country shortly after it commenced, and during all the intervening period, it is stated, the girl has lain, to all appearance, dead. She has now awakened from her somnolence, and is as well as ever. It is reported that she totally abstained from food or water during the entire period.

"The following alleged occurrence if true, furnishes positive evidence of my theory that human beings can hibernate

like the bear, coon, etc.

"Hon. W. G. Osborne, Military Secretary to the Mission sent to the Court of Runjeet Singh, in 1838, was present and an eye witness of the facts as here presented. I copy the following from Mr. Osborne's account: 'The monotony of our camp life was broken this morning by the arrival of a very celebrated character in the Punjaub. He is held in extraordinary reverence by the Sikhs, from his alleged capacity of being able to bury himself alive for any period of time. Gen. Wade, (now Sir Clundie Wade), political agent at Loodbrauva, told me he was present at his exhumation after an interment of several months. Gen. Ventura having buried him in the presence of the Maha Rajah and many of his principal Sadars, and as far as I can recollect, these were the particulars as witnessed by Gen. Ventura. After going through a regular course of preparation, the fakir

pronounced himself ready for the interment, in a vault which had been prepared for the purpose by the order of the Maha Rajah. On the appearance of the Runjeet and his court, he, (the fakir) proceeded to the final preparations that were necessary, and after stopping his ears and every other orifice, through which it was possible for air to enter his body except his mouth, he was stripped and placed in a The last preparation consisted in turning his tongue back and thus closing the gullet, whereupon he immediately died away in a sort of lethargy. The bag was then closed, and sealed by the Runjeet's own seal, and afterward placed in a small deal box, which was also locked and sealed. The box was then placed in the vault, the earth thrown in and trodden down, a crop of barley sown over the spot and sentries placed around it. The Maha Rajah was however very skeptical on the subject, and twice in the course of the ten months he remained under ground, sent people to dig him up, when he was found to be exactly in the same position and still in a state of suspended animation. At the end of ten months the fakir was exhumed in the presence of Capt. Wade, also the Maha Rajah and others. The Captain witnessed the breaking of the seals, and the opening of the box He also examined the inanimate body minutely. It was at first motionless and pulseless, though its appearance was otherwise natural. In two hours the process of restoring the faculties and functions were fully accomplished, and the fakir was apparently as well as ever.

"To accept the above as the truth, I am well aware involves a great stretch of credulity with those who have given no thought to the subject, but it presents phenomena no more marvelous in their character than those witnessed by geologists and others hundreds of times. Lizards, serpents, toads, etc., have been exhumed from solid rocks, where they have been entombed for hundreds of years, deprived of air, food and water. These animals, when found, were to all appearance dead, and yet a few hours' exposure to sun, light and warmth, has fully restored them to their normal conditions. We have many cases of this character on record. If we classify man in the list of hibernating animals, (as I claim we have a perfect right to do), then the facts and phenomena attending the fakir's interment and exhumation are no more mysteries than the phenomena of the entombment and resuscitation of toads and serpents.

"The acceptance of my theory (I say my theory, because I believe it to be peculiarly my own), would I think, give us the key by which to unlock the mysteries that surround the peculiar condition called trance. Many of the phenomena attending these trances—such as prolonged fasting, etc. which have heretofore been regarded as fictions-would at once take their place where they properly belong, in the realm of recognized fact. Some suppose that the hibernating animals live on the disintegration of their own tissue. But such is not the case. I have taken much pains to inform myself on this point. The bear emerges from its winter quarters with no loss of flesh, but rapidly loses its fat immediately afterward, so much so that in ten days after awakening it is reduced to a mere skeleton. Now, the fact being established, that hibernating animals can and do live four months in a year without air, food, or water, and this without the loss of flesh, does it require any great stretch of credulity to believe that under the same circumstances, this condition might be prolonged for an indefinite period? I think not. If this method of reasoning be logical, then this fakir buried alive for ten months, might, had the conditions remained undisturbed, have prolonged his hibernation to ten years—yea, ten times ten years—and the result would have been the same.

"I have dwelt long upon this subject, because the matter has an important bearing in another direction, aside from that of invalidating the conclusions of inductive philosophy. I have long since felt it a duty to enter an earnest and emphatic protest against the well-nigh criminal haste of the American people in burying their dead, or supposed to be dead. This is a fast age. We are a fast people; we live fast; we die fast; and the undertakers conduct their busi-

ness in conformity with the spirit of the times.

"Trances are becoming alarmingly frequent. These cases of suspended animation so closely resemble death, that not a man in all the crowds that frequent the halls of science can detect so much as a technical difference. How many thousands are annually borne to premature graves, from our lack of knowledge of the conditions, only the records of eternity can reveal. Catalepsy, or trance, is often self-induced; more often, however, it is the result of the wide-spread and pernicious practice of drugging with chlo-

ral, morphine, ether and the like. Under the influence of these deadening narcotics, the nervous system gradually loses its sensibility, the circulation becomes weak, the tone of the system is gradually lowered, the blood becomes so impoverished that it is reduced to the temperature of the hibernating or cold-blooded animals. To all who are thus undermining their physical stamina, I would say: Beware! You know not the horrible fate the future has in store for you. Every time you pander to your perverted appetites, you strike a blow at the tree of life; every blow hastens the inevitable result, which is death, or the infinitely worse condition so closely resembling it, called trance. If the result of your folly be the latter, God pity you; for the probabilities are, you will be borne to the tomb while yet your spirit lingers in its earthly tabernacle, there to remain isolated and alone, until, perhaps, the resurrection morn.

would not be so horrible to contemplate; but almost universal testimony in all such cases is, that the mind's action, not only remains perfect, but quickened and intensified a hundred-fold. I once interrogated a man who had awakened from a trance at the moment of his sepulture, as to his feelings while he thus lay to all appearance dead. His answer was prompt and to the point. 'Have you ever felt the paralyzing influence of terrible nightmare? If you have

"Were this condition of trance one of unconsciousness, it

was prompt and to the point. Have you ever left the paralyzing influence of terrible nightmare? If you have had such experience, then you are prepared to conceive of the mental agonies I endured, when I realized that my friends believed me dead, and were making preparations for my burial.' Said he: 'Once I believed there was no hell; now I not only believe, but possess positive knowledge. The hours and days of mental struggle, spent in the vain endeavor to break loose from the vice-like grasp of this worse than horrible nightmare, was a hell of torment, such as no tongue or pen could portray.'

"Believing as I do, from the long and close study of phenomena attending trance, that the steps of a large majority of those who are daily and hourly raising the suicidal arm against their own highest life by the use of narcotics, are leading them slowly but surely to a living tomb, I feel it my duty, as a physician, to raise my voice in solemn protest against this common and growing practice of drugging with

these body and soul-destroying agents.

"Many of the victims of these fashionable vices to whom I have spoken of their danger, and who have thus been awakened to a realization of the situation, have asked me: Is there no means known to science by which this counterfeit of death can be detected?' In answer to the first interrogation, we are compelled to make the humiliating confession that science is impotent to detect the counterfeit from the real. I have carefully studied the literature of the profession for a solution of this problem. The only thing I have learned with any certainty is that medical men and medical schools know nothing with certainty about the matter. The great majority of medical men, were they to speak their honest sentiments, would say with me that there is only one sure and infallible sign of death in any given case, and that is decomposition. What, then, is our duty in the premises? Is it to go on and bury our dead with the criminal haste that characterizes the age, or seek the only remedy that will meet the exigencies of the case-that is, to defer burial until positive proof shall justify the last sad rites of sepulture?

"See the following case: Dr. Joslyn, of St. Charles, Ill., stated in my hearing, and in the presence of a large audience in Harrison's Hall, Minneapolis, that, when a young man, he was prostrated with a fever that refused to yield to professional treatment. He swooned away, apparently dead. His attending physician said he was dead. His father was faithless and unbelieving, and refused to bury. He lay in this condition, apparently dead, fourteen days. The attending physician brought other physicians to examine the apparently lifeless form, and all stated unqualifiedly, 'He is dead.' Some fourteen physicians, among them eminent professors, examined the body, and there was no ambiguity in the expression of their conclusion that the boy was dead. But the father still turned a deaf ear to all entreaties, to prepare the body for the grave. Public feeling was at last aroused. The health officer and other city officers, acting in their official capacity and by the advice of the physicians, peremptorily demanded that the body be interred without delay.

"On the fourteenth day the father yielded under protest; preparations were made for the funeral, when the emotions of the still living object, who was conscions of all transpiring around him, were so intense as to be the means of his deliverance. He awoke from his trance, as he is to-day, alive and well, so far as I know. We, as a people, hold up our hands in holy horror at the mere mention of the word cremation; but how quietly and submissively we submit to the infinitely more cruel and barbarous custom of hurrying the remains of our loved ones into the grave before we have ascertained to a certainty that the captive spirit is free from its earthly entanglements. I am not a advocate of cremation, but far more humane and just would it be to confine the bodies of our loved ones to the devouring element than to consign them to the lasting and perhaps everlasting torments of an existence in a living tomb. If we cremate we have at least one consoling assurance, and that is that our lost ones are dead and their spirits free.

"I have written thus strongly because I feel strongly. I have gone down to the very portals of the tomb and suffered hunger for forty-two days that I might gain light and knowledge on this subject; and now, if by my efforts I can aid in awakening the slumbering consciences of nations and individuals to thought and action upon this all-important

theme, I shall not have endured in vain.

"H. S. TANNER, M. D.

" Minneapolis, Friday, Jan. 9, 1880.

"P. S.—If the New York Neurological Society, or any other medical society (of any school), or any professor of any medical school interested in vital chemistry, (Hammond excepted), desire to test the powers of human endurance under prolonged fasting, or witness the physiological, pathological, or psychological phenomena incident to such a fast, the proposal I made to Dr. Hammond is still open to their acceptance.

"I desire to repeat my fast, because I wish to push my investigations in vital chemistry. My observations were mainly confined in my last fast to physiological and pathological changes. I now desire to study further psychological phenomena and the relations of mind to matter. All I ask is to be provided with suitable apartments during my fast; all other expenses I will bear myself. "H. S. T."

After the publication of the above letter, a reporter again called on Dr. Hammond, when he accused Dr. Tanuer of

misrepresenting him. He now said he never denied having offered Miss Fancher \$1,000 to go without food, and added, "Well, the man is a fraud," (referring to Tanner).

He then goes on to say:

"If Dr. Tanner objects to being watched by medical students, I will accept the proposition which he makes, that he shall be watched by members of the New York Neurological Society. He shall have a good, clean, healthy, well-ventilated room. But out of that room he must not go, during the thirty days, unless he is accompanied by people who are above suspicion of fraud, so that he won't slip into some restaurant and get a good lunch. The more he walks out, however, the more apt he will be not to succeed in his experiment, because in walking he will be using up his vital As Dr. Tanner calls himself a vital chemist, he must know that water is just as much food as beef is, and when I say he must go without food for thirty days, I mean that nothing at all shall go into his stomach. Then, if he succeeds, he will get the \$1,000, and, if he dies, I will give him a decent burial. His attendants, too, will be instructed (so that there may be no cruelty to the man exercised), to give him food whenever he asks for it. But then, of course, he will have failed in his trial.

"If Dr. Tanner will get hold of a little book on 'fasting girls,' continued Dr. Hammond, which I have written, he will see that, long before I ever heard of him, I admitted the possibility of persons going without solid food for thirty days. I am perfectly willing to put him through the same experiment he so graphically adduces of the East Indian fakir, cutting the period down to thirty days instead of several months. To sum the matter up, if Dr. Tanner will go thirty days without taking solid or liquid food of any character whatever, under such conditions as may be settled upon by Dr. John C. Dalton, Professor of Physiology in the College of Physicians and Surgeons in this city, he shall

have the money."

He concluded the interview by saying, "I don't believe there is any such person as Dr. H. S. Tanner, of Minneapolis. * * * I am inclined to think that the whole thing is a huge Western joke." Dr. Tanner, however, came to New York about the middle of May, 1880, and notified Dr. Hammond, in person, of his readiness to commence the fasting at once. Dr. Hammond told him he could not talk to him then, as it was his office hours, but made an appointment to meet him at his house, at 8 o'clock, on the following Monday evening, May 24th, when he expected several members of the Neurological Society present.

Dr. Tanner called at the appointed time, but neither Dr. Hammond nor the members of the Neurological Society were there, and he was informed that Dr. Hammond had gone to the theatre.

On the following Friday, Dr. Tanner received the following note:

"May 27th, 1880.

"Dear Sir:—I was sorry to miss you the other evening, but it was unavoidable. Will you kindly write me, stating what your proposition is, or if you will come to the meeting of the New York Neurological Society, No. 12 West 31st Street, on Tuesday, at 8 o'clock, on which occasion I will bring the matter before that body, I am prepared to accept a proposition for you to go without all food for thirty days, and to pay your expenses here and back. If you succeed, I agree to pay you \$1,000, provided you allow me to furnish the watchers and the place, and to impose such other conditions as may be proper.

"Truly yours.

"WILLIAM A. HAMMOND."

At the appointed time, Dr. Tanner repaired to the place of meeting mentioned in the above note, and there learned that the Neurological Society had adjourned its meetings till Fall. He waited some time expecting some message from Dr. Hammond, but none came. The next day, June 2d, he called on Hammond for an explanation. Hammond told him the meeting was not held because the American Medical Association was holding its meetings in the city at the time. Dr. Tanner then asked him what he proposed to do, since it was impossible to hold a meeting of the Neurological

Society. He proposed to have Tanner go into his house and perform his part under watchers he would appoint. This Dr. Tanner refused to do, and insisted on adhering to the original proposition. Dr. Hammond said that would be impossible, as the Society did not meet again till Fall; and besides, he did not think he could get the Society to act, because he (Tanner) was not a regular physician. Dr. Tanner replied that this was to be a scientific test, and not one to ascertain whether he treated patients in a "regular" or an "irregular" way. Hammond then suggested that he remain till Fall, and begin his test during the meeting of the National Neurological Society. He urged him by saying, "It is a capital idea, for, in case of success, you will achieve not only a local but a national reputation."

Dr. Tanner objected to the delay and expense, and Dr. Hammond said he did not see how it could be avoided. This ended the matter, and the interview terminated, without any hint of a letter being sent to Dr. Tanner the previous day, containing a proposition to call a special meeting of the Neurological Society.

After Dr. Tanner commenced making other arrangements and had expressed his disapproval of Dr. Hammond's actions, the latter, in conversation with reporters on June 18th, claimed to have written Dr. Tanner the following note:

"JUNE 1, 1880.

"Dear Doctor: The Neurological Society will hold a special meeting on the matter of your fasting at such time as will suit your convenience.

"Yours sincerely,

"WILLIAM A. HAMMOND."

To this note, Dr. Hammond said he got no reply, and consequently claimed that Dr. Tanner was not willing to subject himself to the proposed test.

The reporters called on Dr. Tanner the same day (June 19th), and when shown a copy of the above note and asked

why he had not answered it, he said because he had never received such a letter.

This was on Saturday, and on Monday morning, June 21st, this letter was received by Dr. Tanner, bearing the date of June 1st, but post-marked June 19th, 9.30 P.M. It would thus appear that Dr. Hammond mailed this letter to Dr. Tanner after the interview with the reporters of the 19th of June.

Naturally, Dr. Tanner was not slow in making known this apparent deception, and as promptly did Dr. Hammond affirm that he mailed the letter himself on June 1st, and that Dr. Tanner was again guilty of fraud in either changing the figures of the post-mark, or taking advantage of a blurred stamp to misrepresent the date on the envelope. Unfortunately for this assumption of Dr. Hammond's, the post-mark was too plain to be mistaken or altered. Dr. Tanner took the letter to Station G for examination, and received the following:

"We positively assert that the letter addressed Dr. H. S. Tanner was mailed at this office, at the time indicated by our stamp, and at no previous time.

".M. A. REED, Supt. Station G."

For still more definite information the letter and envelope were again presented at the mailing office, and the doctor received the following reply:

> "POST OFFICE, NEW YORK CITY, N. Y. FOURTH DIVISION, CITY DELIVERY DEPARTMENT, STATION G, June 26th, 1880.

" Dr. H. S. Tanner:

"Respectfully informed that the mail-mark on the envelope hereto attached is correct, and was collected from lamp-post box on the collection tour commencing at 7.80 p.m. on the 19th inst., and would be delivered on Monday morning, 21st inst., by Station F, on first delivery from that office. There has been no alteration of the date indicated by the stamp, neither has it been obliterated by accident or other cause. It is clear and defined, and speaks the truth.

"Yours,

[&]quot;M. A. REED, Supt. Station G."

The General Superintendent of the New York Post Office, as well as the Superintendent of Station G, say that there was no probability of the letter having remained in mail-box for eighteen days, as they are opened twelve times a day, and by different parties. As additional testimony against Dr. Hammond, three Post Office experts, who have examined the letter carefully, unequivocally state that the note itself bears unmistakable evidence of having been written within a day or two of the time of mailing. Taking all these facts together, and the additional one that this is not the first time Dr. Hammond has been accused of sending letters in the same manner, and that too by medical men who stand high in their profession, and it must be admitted that Dr. Tanner has a strong case against Dr. Hammond.

Desiring to carry his investigation still further, Dr. Tanner called on Dr. Seguin (a former president), and learned from him that both the President and Secretary of the Neurological Society were out of town; that the latter was in Europe. Other members whom he visited verified the absence of these officers, and also informed the doctor that neither of them had power to call a special meeting of the Society, as that power was vested in the Council, many of whom were also out of the city. Yet in the face of these facts. Dr. Hammond told several reporters that he had arranged with the Secretary of the Society to call a special meeting to consider Dr. Tanner's case, and again published a letter in the Herald of June 25th, in which he says: "I saw the President of the Neurological Society on the 28th of May. and arranged for a meeting at such time as would suit Dr. Tanner." He afterwards accused Dr. Tanner of evasion: but the most casual observer can readily see that all the evasion practiced was on the part of Dr. Hammond.

Dr. Tanner, having completed his arrangements to begin his fast under the auspices of the faculty of the United States Medical College, notified Dr. Hammond of the fact, and invited him to be present with his watchers. Dr. Hammond made no reply, but said to a reporter, "I was invited to be present, but no regular medical practitioner could associate with such chaps as these."

Again Dr. Hammond is interviewed by a *Herald* reporter, and on June 24th the following appears in that paper:

"I have offered Dr. Tanner \$1,000 to live forty days without taking any kind of nourishment. Now he talks about bad faith and false dates on letters, etc. They have nothing to do with it. The money is ready, and the experts are ready, whenever Mr. Tanner chooses to put himself under the surveillance of three leading physicians, representing three leading New York institutions, and perform his feat fairly and openly. * * * * * My offer of \$1,000 is always open to Tanner, or any one else. I will not go near him, but leave him to Dr. Dalton, of the College of Physicians and Surgeons; to Dr. Flint, of Bellevue; and to Dr. Arnold, of the University of New York. If they say the man does not cheat, I will pay the money."

Dr. Tanner immediately sent to Dr. Hammond, by messenger, the following letter:
"New York, June 25, 1880.

" Dr. Hammond:

"I see by the *Herald* of yesterday that you are out with a new proposition, and have stated it in such a way as to mislead the public into the belief that it is the original about which there has been so much controversy. You say you have offered Dr. Tanner \$1,000 to live forty days without taking any kind of nourishment. Now I challenge you to name the time and place, and the person to whom you made this proposition. You cannot do it; it is simply another dodge at evasion and delay.

"I will, however, accept your last proposition, provided it does not include abstinence from water. I will submit to any conditions the medical gentlemen you have named shall impose, only stipulating that the room where the experiment is to take place shall be large, light, and well ventilated. I demand that the \$1,000 shall be deposited in some reliable bank, subject to my order in case of success. I shall insist also that you keep entirely away from me as you propose.

"I will give you till Monday, 12 m., to make your arrangements; if not on Irand at that time, with contract to be duly signed and sealed, I shall commence my fast as I had previously arranged, at Clarendon Hall. In case you fail to make arrangements by that time, I invite your representative to be present at all times to see that the test is fairly and properly conducted. If I succeed in this fast, I will stand ready to enter upon the thirty days' fast without water, on the 1st day of October, on such terms as shall be agreed on by Dr. Flint, Dr. Dalton, and Dr. Arnold.

"Please let me know by bearer what you will do, and oblige,

"H. S. TANNER."

Dr. Hammond replied to this letter as follows:

"43 West 54th St., New York, June 25th, 1880.

"The reporter wrote 40 for 30. I have not altered my proposition in the least, nor do I intend to alter it from what I wrote you.

"WILLIAM A. HAMMOND."

Dr. Tanner also published his acceptance of Dr. Hammond's last proposition in the *Herald* of June 25th. He felt now that there was a chance of beginning the fast on Dr. Hammond's terms. He consequently called on the gentlemen named by Dr. Hammond, with the following result: Prof. Arnold was absent from the city, and it was not certain when he would return; Prof. Dalton was about starting on his summer vacation, and said he had no time to give to the matter; and Prof. Flint, Jr., expressed surprise that Dr. Hammond should send any one to him, and said he would have nothing to do with anything Hammond was connected with, as he had no faith in the man.

Again, on June 26th, Dr. Hammond wrote another version of his proposition to a reporter of the Sunday News, which is as follows:

"If Dr. Tanner will go thirty days without all food, allowing himself to be watched by persons to be selected jointly by himself and myself, and subject himself to such other necessary conditions against all possible fraud, that may be imposed by the professors of physiology in the three regular medical colleges in this city, I will give him \$1,000, or I will give him this sum if he will fulfill this task to the satisfaction of the three said professors.

"(Signed),

"WILLIAM A. HAMMOND."

Whatever he might have expected from two of these professors, Hammond certainly could not be ignorant of the fact that his previous relations with the third rendered it impossible for them to carry on any investigations in common.

Dr. Tanner had at this time selected watchers for himself, and invited not only Dr. Hammond, but all medical societies in New York, to appoint watchers who might act in conjunction with his, or entirely independent of them. Hammond and his watchers failed to appear at the time appointed, and Tanner's second great fast was commenced under the supervision of reliable watchers appointed by the United States Medical College.

Thus ended the controversy between the unknown Minneapolis doctor and the celebrated, or, more correctly speaking, notorious, Surgeon-General Hammond, [retired (?)]. The profession and the public can readily draw their own conclusions from the facts here presented, all of which can be verified by the most trustworthy testimony.

CHAPTER IV.

THE NEW YORK FAST.

At twelve o'clock, noon, June 28th, 1880, Dr. Henry S. Tanner commenced his second great fast, in the lecture-rooms of the United States Medical College, Clarendon Hall, 114 and 116 East 13th Street, New York city.

Arrangements had been previously made by the faculty of the United States Medical College to keep up a reliable and continuous watch till the doctor should complete his task or express his desire to discontinue it. Other colleges and medical societies had been invited to send representatives, but none of them put in an appearance.

During the first week, the U. S. Medical College watchers were alone. At the end of that time, however, great interest began to be manifested, and large numbers of physicians, of all schools of practice, called to see the faster. Many of them would remain for several hours, watching his every movement, and then certify to their presence and to the doctor's abstinence from food during the time they remained.

After the first week, a number of allopathic physicians arranged among themselves to keep up a watch, which, with the exception of a few interruptions, was continued to the end. The *New York Herald* also established a watch of their own after the first week, which was kept up to the end without a moment's interruption.

As many of the details of the fast would prove of no general interest, we shall only aim to give, in these pages, a condensed abstract of the daily record, with such incidents and observations as have a direct bearing upon the case before us.

First Day.—At 12 m., June 28th, 1880, Drs. P. H. Van der Weyde, David Wark, R. A. Gunn, Wm. L. Tuttle, A. E.

E. Falkner and Joseph R. Buchanan met to examine Dr. Tanner, preparatory to his beginning his forty-days' fast.

In answer to questions, the doctor stated that he had a slight diarrhoea during the previous night; that he ate no solid food during the day, but took one quart of milk for breakfast, and the same quantity at 11.45 A.M. He had made no special preparations for beginning his fast, and kept up his usual diet till that morning.

The large hall and adjoining rooms set apart for his use were thoroughly searched. Then he was stripped and his person and clothing carefully examined, but no food of any kind was found.

He weighed 157½ pounds, measured 40 inches around the breast, 38½ inches around the abdomen, 22 inches around upper part of thigh, and 11½ inches around middle of arm. His pulse was irregular, averaging 88 beats per minute; temperature, 99° (98½° being normal); respiration, 18.

At 9 P.M. his bed was thoroughly searched, and he retired for the night. At this time his temperature was 98½°; pulse, 82, full and regular.

On the morning of the 29th he arose at 7 a.m., feeling well. During the forenoon he expressed himself freely on the treatment he had received from Dr. Hammond; yet he regretted that no one was present to represent him. He conversed with a number of callers, and said he was confident he could complete the task he had just undertaken.

During the first twenty-four hours he was watched by Drs. Falkner, Wark, Newth, Tuttle, Van der Weyde, Buchanan, Gunn, Strickland and Goethals, all of whom certify that he took no food during their respective watches. During the same time he slept about six hours, drank 56 ounces of water, and voided 17 ounces of urine.

Second Day.—At 12 M., June 29th, the second day of the fast began. The doctor talked freely with his watchers on

various medical subjects, but nothing transpired of any special interest, except the reception of the following letter:

"129 PIERREPONT STREET, June 28, 1880.

" Dear Sir :

"I learn from the newspapers that you have been desirous of having a committee from the New York Neurological Society investigate your claim in regard to fasting. As there would seem to be some misunderstanding between you and Dr. Hammond upon the subject, I write to say that if you still entertain this desire, it will give me pleasure to afford you every facility to establish your claim by unimpeachable scientific evidence. It is now so late in the season that it may be impossible to assemble the proper gentlemen; but I will call a special meeting of the Society, and have appointed a committee of scientific experts to fully investigate your ability to fast. I can assure you of the most perfect justice in the selection of these gentlemen, with whom some of your own friends may cooperate. All that will be asked of you in return will be that the investigation shall be conducted with the most rigid and minute care, so that all doubt may be set at rest. If it prove impossible to gather the necessary gentlemen at present, I will call another meeting in the Fall. I take it for granted that you are earnestly desirous of having your capability in this respect accurately tested, and this being so, I am equally eager to extend every aid to vou.

"Pray, let me hear from you as soon as possible.

"Yours very truly,
"Landon Carter Gray,
"First Vice-President, at present Acting President,
New York Neurological Society.

"DR. TANNER."

This letter the doctor immediately answered, by stating that he had already commenced, and was now on the second day of his fast. He earnestly requested Dr. Gray to call a meeting of the Neurological Society, and take such action as would enable them to appoint watchers to be with him during this fast. He offered them every facility for observation, and conducting such experiments as they desired.

He was watched during the second twenty-four hours by Drs. Goethals, McDonald, Reiley, Tuttle, Gunn and Stone, and medical students Plunkett, Johnson and Watson, who certify that no food had been taken.

He drank 20 ounces of water, voided 13 ounces urine, and slept about 8 hours. His temperature registered 98%; pulse, 84; respiration, 16.

Third Day.—At noon, June 30th, the third day began, with Dr. Wark on duty. The faster declared his intention of doing with little water, and only drank 5 ounces during the day. He, however, rinsed his mouth several times, only losing about a teaspoonful of the water each time. On being asked if he felt any hunger, he replied, "Oh! yes; I feel a hunger, but I don't allow it to get the better of me. I keep it under the control of my will."

Drs. Wark, Gunn, Danelson, Tuttle, Reiley and Stone, and students Plunkett, Johnson, Egan and Gerken, served as watchers during the third twenty-four hours, and all certify that during their respective watches he took no food. His weight was found to be 153 pounds, a loss of 4½ pounds since commencing his fast; pulse, 78; temperature, 98½°; respiration, 16; urine voided, 22½ ounces.

Fourth Day.—At mid-day, July 1st, Dr. Tanner entered upon the fourth day of his fast. His condition appeared normal, and continued so throughout the day. He conversed freely with his watchers and visitors, read all the morning papers, and wrote several letters to friends.

At this time, letters began to come in from all quarters, but care was taken that all were opened and examined before being given to the doctor, thus preventing the possibility of his obtaining any nourishment.

The following letter was received in answer to the one the doctor wrote to Dr. Gray on the 29th of June:

"129 PIERREPONT STREET, June 30th, 1880.

" Dear Sir :

"Your note of the 29th came duly to hand. I regret that all your arrangements should have been made. It would be impossible to get any of the members of the Neurological Society to take any part in your present undertaking, inasmuch as it is understood to be under the auspices of medical gentlemen who do not belong to the regular profession. But if you are desirous of attempting another fast when this present one is ended, I shall be glad, as I said in my letter, to afford you every facility to have the matter tested. I shall endeavor, in the meantime, if I can find time, to pay you a visit at Clarendon Hall.

"Yours very truly,

"LANDON CARTER GRAY.

"H. S. TANNER, M.D."

After reading this letter the doctor remarked: "Dr. Gray don't seem to have noticed the inconsistency between his two letters. In his first, he speaks of my own friends cooperating, and now when he is informed that those I have selected, have charge of the experiment, he refuses to cooperate because of a difference of opinion on medical ethics. I am surprised at, and ashamed of, the narrow-minded bigotry of the profession."

The watchers during the fourth twenty-four hours, were Drs. Reiley, Holbrook, Wark and Stone, and students Plunkett, Johnson and Young, all of whom certify that the doctor took neither food nor water, during their respective watches. He however rinsed his mouth frequently with ice water, without swallowing any. Pulse, 84; temperature 98½°; respiration, not taken; mind clear and active; physical strength unimpaired; sensation of hunger less than previous day; urine voided, 19 ounces.

Fifth Day.—The fifth day began at noon, July 2d, and was uneventful throughout. A large number of visitors called during the day, and the doctor complained of the air

being vitiated. During the afternoon and evening of Friday, he felt badly, but would not admit that his stomach bothered him.

His watchers during the fifth twenty-four hours were Drs. Harwood, Reiley, Wark, Tuttle, Marsh, (druggist) and Stone, and students Egan and Plunkett. His pulse taken at different hours varied as follows; 90, 92, 66, 100, and 78, per minute. When the pulse had fallen to 66, he complained of being cold, but on being well covered up a reaction soon took place and the pulse reached 100. Towards the close of this day they were again 78. His temperature ranged from 98 to 98₁₀, weight, 147½ lbs.; and he voided 17½ ounces of urine. At the close of the day he felt and looked better than at the commencement, and remarked that he was confident he was over the worst of it.

Sixth Day:—The sixth day of the fast began at noon, July 3d. On being asked if he felt hungry, the doctor replied, "Not so much as I did two days ago. Of course, I still feel hungry, but not much more so than if I had only missed one meal." Physicians calling to see him were inclined to ask him questions, and it was difficult to prevent him from engaging in animated discussions. He became particularly earnest whenever Hammond's name was mentioned.

Drs. Wark, Reiley, Weeks, Miller, Gunn, Briggs, Morris, and Danelson, and students Egan and Watson, constituted the watch for the sixth twenty-four hours. He rinsed his mouth frequently, but swallowed no water. Pulse ranged from 89 to 100; temperature, from 98° to 982°; urine voided, 14 ounces.

Seventh Day.—The seventh day began at noon, July 4th, and as visitors were excluded all day Sunday, the doctor felt remarkably well. He appeared bright and cheerful,

talked freely with the watchers and reporters, and remarked that, now he would feel better every day. During the night he asked for a wet towel to be applied to his head. On being urged to drink water, he persistently refused, saying that he felt better without it. His sleep was much disturbed during the night by the noises incident to the 4th of July celebrations.

Dr. Van der Weyde, who had charge of the chemical analyses, wrote as follows in the record book:

"I was surprised to find Dr. Tanner so well. I expected a change, but found none. This expectation was based on great changes I found in the urine, in which there is a surprising diminution of urea.*

"P. H. VAN DER WEYDE, M. D."

During the forenoon of Monday, July 5th, a large number of physicians called, and most of them expressed great interest in the progress of the fast.

During the seventh twenty-four hours, the watchers were Drs. Danelson, Harwood, Davega, Bradley, Westcott, Van der Weyde, Wark, Molesworth, Bates, Gunn, Badham and Stone, and students Plunkett, Johnson and Wright.

During this time the pulse ranged from 72 to 90; temperature, from 98 to 98½°; respiration, 16; weight, 143½ lbs.; urine voided, 144 ounces.

This completed the first week of the fast, the result of which is summed up as follows; 168 hours without food; 132 hours and 15 minutes without water, excepting 4 ounces on June 30th, which he took against his will; loss of weight, 14 lbs.; urine voided, 1174 ounces, or 7 pints and 5 ounces.

Eighth Day.—At 12 o'clock, noon, July 5th, the doctor entered upon the second week of his fast. Even those who doubted his honesty, at first, were forced to admit that he

^{*}Dr. Van der Weyde's Report will be found at the end of the chapter.

was faithfully going without food. Many predicted that he could not hold out another week, as the loss of 2 lbs. a day would use up all the tissue he had to spare before that time. He, however, appeared remarkably well for a man who had not broken his fast for a week. Not the slightest evidence of mental disturbance existed, and the doctor said he had not at any time experienced dizziness or headache.

It was now announced by the "Herald" reporters that that paper had arranged to keep up a continuous watch till the end of the fast. This pleased Dr. Tanner, as he was anxious to have as many watch him as possible, so as to add to the value of his experiment.

He gargled his throat frequently, but did not swallow any water, still declaring he did not feel thirsty.

Early on the morning of the 6th of July, he walked with his watchers to 17th Street, then around Union Square and back to 13th Street, a distance of fully \(\frac{2}{3} \) of a mile. His step was quick and elastic, and he walked without the least support. He was bright and cheerful during his walk, and he confidently asserted his ability to accomplish his task, notwithstanding Dr. Hammond's predictions that he must fail.

Drs. Wilson, Griswold, Tuttle, Wark, Reiley, Wilder, Gunn and Stone, and "Herald" representatives constituted the watch during the eighth twenty-four hours.

The pulse ranged from 77 to 84; temperature, 98½°; respiration, 14; urine voided, 13 ounces.

Ninth Day.—The ninth day of the fast commenced at 12 o'clock, noon, July 6th. During the afternoon of the 6th he reclined on his cot the greater part of the time, and had wet towels frequently applied to his head. He talked with many of the visitors, and manifested great interest in all conversations relating to the subject of fasting, and also in the newspaper reports of his condition.

In speaking of the opinions expressed by various physicians, he remarked, "they have a great deal to learn yet regarding the forces that keep up the life of the body. They think they know it all, but I will show them before I get through that there are some things that they will have to re-study. I believe this test of mine proves the immortality of the soul, for according to the teachings of scientists, I must be supplied with phosphates or lose my reason."

He would have continued to talk on this subject had he not been cautioned against exhausting himself.

On this day the self-styled "regular" physicians had completed arrangements to keep up a watch, and they provided books to keep a record of their own observations, though Drs. Badham, Harwood, and a few others had served as watchers before this arrangement had been made. A number of the gentlemen who comprised this new watch are members of the Neurological Society, and expressed regrets that arrangements had not been made for the Society to co-operate with the United States Medical College watch.

During the day the doctor frequently rinsed his mouth, but swallowed no water. He also had the wet towels applied to his head occasionally during the night.

In answer to a question regarding his hunger, he replied, "I do not feel the least sensation of hunger. I have got past that now."

During the ninth twenty-four hours, the watch was kept up by Drs. Bartlett, Reiley, Tuttle, Rogers, Pierce, De V. Wilder, Wark, Jarvis, Bradley, Allen, Danelson and Griswold, student Egan, and *Herald* reporters.

About 7 A. M., July 7th, he walked nine times around the large hall, after which his pulse reached 116, but soon fell to 96, and ranged from that down to 88, during the day. The temperature ranged from 98 to 98²/₁₀°; respiration, 16; weight, 141³/₄; urine voided, 13 ounces.

Tenth Day.—The tenth day of the fast began at 12 o'clock, noon, July 7th. The doctor complained very much of the heat, and had his cot elevated into the open windows in front of the building. He had the wet towels applied frequently to his head, and toward the evening of the 7th he asked for wet sponges to bathe his face and hands with.

A lady volunteered some music on the piano, which the doctor enjoyed exceedingly, and several times during the day he asked if some one would not play for him. He retired early, after taking a sponge bath, but did not sleep, and frequently asked for wet sponges during the night.

THE BRADLEY DISTURBANCE.

The writer was on watch from 7 to 12 P. M., July 7th n. company with Mr. Frost Johnson, the well-known arkst, who had also spent two years in the study of medicine. About twenty minutes before midnight the writer let Mr. Johnson in company with Dr. Storer, of the Old School, in charge of Dr. Tanner, while he went to fill up his record. At about a quarter to 12, Dr. Bradley and a friend, who came in about half an hour before, left the room and asked Dr. Harwood to follow them. They all returned in about ten minutes, accompanied by Prof. Wark, who was going on watch at midnight. Dr. Bradley and his friend accused Mr. Johnson of taking something out of his pocket surreptitiously, giving it to Dr. Tanner, and then hurriedly putting something else into his pocket. He further said he believed it was food, and that the value of the experiment was destroyed, and it was useless to go on any further.

Mr. Johnson indignantly denied the accusation; said he had handed Dr. Tanner a sponge wet with water, and then wiped his hands on his handkemhief and returned it to his pocket.

When Dr. Bradley was asked why he had not mentioned

his suspicions at once without going out, he replied, "I followed my own ideas; I had no definite plan, but thought I would go and tell Hammond what I saw."

Had Dr. Hammond not insisted upon it, he would not have returned to the Hall, and even as it was he would not listen to anything reasonable. He asserted that he squeezed eight ounces of fluid cut of a sponge he took from Dr. Tanner, and said it might be beef tea. It was subsequently ascertained that the sponge could only hold three ounces of water when perfectly saturated.

The writer remarked to him, that as a scientific man he had no right to make such an accusation without more evidence than he had, especially as he could have verified his suspicions on the spot. If there was beef tea on the sponge be could detect it now on the floor, and on his own hand.

Or. Wark then suggested that an emetic be given to Dr. Tanner, which suggestion was accepted, and earnestly urged by the latter, as a sure means of proving whether he took had or not. Dr. Bradley would not agree to this, claiming that it would prove nothing, as the food would be absorbed. Not more than half an hour had elapsed, however, and have physicians present agreed that it would be a certain test whether food was taken or not.

Dr. Tanner, then, with tears in his eyes, begged Dr. Bradley to do him justice, asked him if he could look him squarely in the eyes, and then say he was a man who would stoop to such a fraud. "If I am getting food," he continued, "redouble your watch, and you can demonstrate my inability to accomplish my task, long before the expiration of the remaining thirty days." Dr. Bradley then proceeded to make a prejudiced and unwarranted statement to the Herald, reporter, and indulged in profane and slang language, that was anything but creditable to a man claiming to be a scientific expert.

Mr. Johnson on the other hand, was dignified and gentle-

manly, and made a clear statement of all that transpired. He said, "after handing Dr. Tanner a wet towel for his head, and a wet sponge, I wiped my hand on my handkerchief. Then Dr Tanner asked me to feel if there was anything like a rope, stretched across the centre of his cot, for he felt something cut him. I passed my hand under the cot, and found the sharp edge of one part of the patent cot, pressing tightly against the doctor's leg. That was all the movements I made, and Dr. Bradley saw no other whatever. I am well known; Frost Johnson is my name, and as I have no interest in Dr. Tanner, only that he should have fair play, no one will believe for a moment that I would perpetrate such a stupid fraud."

Dr. Bradley again talked boisterously, and Mr. Johnson said he would have nothing further to say to a man who was not a gentleman, and who was not in a condition to know what he saw.

Dr. Storer corroborated Mr. Johnson's statement concerning the handing of the sponge to Dr. Tanner, and he and Dr. Harwood, both Dr. Bradley's associates on the Old School watch, agreed with the other gentlemen present, that Dr. Bradley had no ground on which to make an accusation.

Dr. Tanner was very much excited over this occurrence, and did not recover from the effects of it for several days. He remarked that such a scene was worse on him than five days' fasting would be.

After Dr. Bradley left he called for water and drank 4 ounces, the first he took since June 30th.

On the morning of July 8th, in conversation with Dr. W. C. Jarvis regarding Dr. Bradley accusations, Dr. Tanner was military affected (even to tears). He read the papers carefully, and was much relieved when he found how little weight Bradley's accusation carried with it.

The watchers for the tenth day were Drs. Jarvis, Smith,

Rogers, Reid, Kent, Wark, Reilev, Eddv. M. N. Miller G. W. Miller, Peck, Gunn, Griswold and Wilson, Mr. Johnson, and Herald watch, and in spite of the Bradley accusation, all expressed their belief in the implicit honesty of Dr. Tanner, and the genuineness of his fast.

The pulse ranged from 80 to 98; temperature, from 98 to 991°; respiration, 14; water drank, 4 ounces; urine voided, 133 ounces.

Eleventh Day .- At 12 o'clock, noon, July 8th, the eleventh and most exciting day of the fast began. "The Bradley Row," as it was designated, was freely discussed by visitors, watchers, and reporters alike, and even those who had suspected the possibility of Dr. Tanner getting nourishment in some way, unqualifiedly condemned Dr. Bradley's conduct. Several who were present the previous night, as well as Dr. Tanner himself, expressed themselves willing to testify that Dr. Bradley was not in a condition to be a competent witness to anything that transpired.

The doctor again complained of the heat, and was still excited and irritable. It was difficult to keep him from talking about the occurrence of the previous night, and he insisted that Mr. Johnson and himself should make affidavits denying Dr. Bradley's assertion. The following were then prepared and sworn to, viz:

CLARENDON HALL, NEW YORK CITY, July 8th, 1880.

I hereby positively affirm that I have totally abstained from all food, either liquid or solid, from Monday, June 28th, 1880, at 12 m., to the present time. I also totally abstained from water for eight days, but between 12 and 1 a. m., to-day, I took 4 ounces of water. The suspicions of Dr. Bradley regarding Mr. Johnson handling me anything are entirely unfounded. He handed me nothing but a towel and a sponge, both wet with water, and the sponge was handed to him by Dr. Storer, and neither of these articles contained anything but water. anything but water.

H. S. TANNER, M. D.

Subscribed and sworn to before me, this 8th \ day of July, 1880, at 5:10 o'clock, P. M.

WM. VAN TASSELL, Notary Public, City and County of New York.

•

NEW YORK CITY, July 8th, 1880.

At no time during my watch with Dr. Tanner, at Clarendon Hall, either on yesterday (Wednesday) night, or at any other time, did I give, or see given to him, any article of food, either in solid or liquid form.

FROST JOHNSON.

Sworn before me this day New York, July 8th, 1880.

WM. VAN TASSELL,

Notary Public, City and County of New York.

During the evening, several visitors played the piano, which the doctor greatly enjoyed. He retired early, and though he awoke frequently, his sleep seemed to be quiet and refreshing.

Some of the allopathic physicians who had organized the watch of that school, declared their intention of withdrawing, which they did. Others, however, remained, and with one or two slight interruptions continued till a reorganization of their watch was effected.

The daily mail had now become very large, but every letter was opened before they reached the doctor's hands, and thus it could not be said that he received any nourishment through the mails.

On the morning of July 9th, he said he felt better than he had for two days. He arose early, and after washing and dressing, he asked for the morning papers, and read everthing that was said about himself. He frequently rinsed his mouth, but refused to drink. In speaking of the water he drank the previous day, he said: "I was much excited by Dr Bradley, and for a moment my mind was occupied so, that my will-power lost control of my stomach, and hence I felt I needed the water. In the same way I shall take nourishment the moment my system peremptorily demands it."

On the morning of 9th July, the doctor was presented with some fine bouquets, and was again favored with music, both vocal and instrumental, which he encored repeatedly.

The watch of the eleventh twenty-four hours was kept up by Drs. Kent, Wilson, Reid, Danelson, Nivison, M. N. Miller, Westcott, Tuttle, Badham, Reiley, Gunn, and Griswold, students Plunkett, Watson, and Egan, and the Herald watch.

The pulse ranged from 80 to 94; temperature, 983 to 100°; weight, 1393 pounds; urine voided, 16 ounces.

Twelfth Day.—At midday, July 9th, the twelfth day of the fast commenced. Having for several days spent most of his time in the room at the north end of the large hall, facing the street, he found the noise bothered him so as to prevent him from getting a sound sleep. He now had his cot removed to the gallery at the south end of the hall, and ordered that no more visitors be allowed to enter till he had a rest.

He conversed freely with several physicians, and gave no evidence of mental weakness.

At 2 o'clock, he again goes down to the main hall, where he could be seen by visitors. The noise of conversation annoys him somewhat, and he seems more nervous and restless during the afternoon. Visitors were again excluded at 4 o'clock, when he again went to the south gallery and had several short naps. His head was kept constantly moist and cool by the application of wet towels. Though he desired these applications, he said he had no symptoms of headache. He was very warm and the cold water refreshed him. He also had his feet bathed with cold water. Before retiring for the night, he took a bath, and than ran around the room several times. Before this he was quite irritable, but was more agreeable afterward. He slept about three hours, when he awoke and entered into a lively conversation with his watchers about Dr. Bradley's attempt to thwart him in his efforts to carry on his fast.

The doctor slept about five hours during the night, and

awoke bright and cheerful. He took another sponge bath in the morning, and a little chilliness which he felt when he first got up, entirely passed off. He rinsed his mouth more frequently, and asked oftener for wet sponges for his head and face during this day than at any previous time, but still he refused to drink water.

The watchers for the twelfth day were Drs. Griswold, Wilson, Westcott, Wark, Molesworth, Neil, Kunzé, de V. Wilder, Goodman, Peirce and Kent, students Plunkett and Egan, and *Herald* watch, all of whom certify that the doctor took no food or drink during their respective watches.

The pulse ranged between 80 and 96; temperature, between 98 and 99½°; respiration, 14; urine voided, 14 ounces.

Thirteenth Day.—The thirteenth day of the fast, which commenced at noon, July 10th, found the doctor less irritable than he was the previous day. He was not much disposed to talk, and reclined on his cot most of the afternoon. He continued to rinse his mouth frequently, but drank no water.

He arose at 6 A. M., July 11th, and after taking a sponge bath he dressed himself, and then called for the morning papers. Some of the papers contained reports of interviews with physicians about the doctor's fast, and considerable was said about the likelihood of his taking opium pills, which would help to sustain life. After reading these statements the doctor remarked: "These fellows will continue to show their ignorance. Don't they know that opium would be the worst thing I could take in my condition. It would at once arrest the disintegration of tissue, and as such waste is necessary to support life, while I am taking no food, if it was arrested, I would certainly die. I can teach those 'regular' doctors a good many things they never dreamed of. They base their opinions on old authorities, while I investigate,

and find the truth for myself. And as for taking opium pills, or anything else," he continued, "I am sure there are eyes enough on me to detect a fraud of that kind, if I attempted it."

The watch of the day consisted of Drs. Kent, Wark, E. P. Miller, Badham, Nivison, Griswold, Goodman, Danelson and Price, students Plunkett, Watson, Wright and Brash, and the *Herald* watch.

During the day the pulse varied from 89 to 96; temperature, 96\ to 97\ \; respiration, 13; weight, 136\ \; pounds; urine voided, 15\ \; ounces.

Fourteenth Day.—At noon, July 11th, the fourteenth day of the fast began. The doctor was resting on his cot, at midday, and did not get up till after 2 o'clock. He said he felt well, and he certainly showed no indications of being ill, or suffering. He still drank no water, but rinsed his mouth, and bathed his face and hands frequently with wet sponges. He said, "the two weeks are nearly over, and in spite of the predictions of the 'knowing ones' I am not dead yet, and what is more, I am not going to die, I know more about this fasting business than any of them, and I shall not only complete my forty days, but live to see the doctors change their ideas on this subject."

At 6:50 P. M., he walked to Union Square, accompanied by Drs. Maurice N. Miller, David Wark, and the *Herald* reporter. After resting a few minutes, they walked around the square, and returned to the hall. The distance walked was about half a mile.

He retired as soon as he returned from his walk. He slept well during the night, and awoke at 6 A. M. After dressing, he took another walk to Union Square and back, accompanied by the watchers.

He called for the morning papers at 7 o'clock, and read all the accounts of his fast, commenting on the various re-

ports as he read. He conversed freely with his watchers and entered eagerly into discussion with those who differed from him.

Drs. Danelson, Price, Gunn, Wark, Hofmann, Kunzé, Briggs, Goodman, Griswold, student Kinne, and *Herald* watch, certify that during the fourteenth day, the doctor took neither food nor water.

The pulse ranged from 89 to 100; temperature, from 98 to 984°; respiration, 16; weight, 133 pounds; urine voided, 21 ounces, intellect clear and unimpaired; senses of feeling and hearing more acute than at the beginning of the fast.

The second week of the fast was thus completed at 12 o'clock, noon, July 12th, and a review of the result gives the following:

Loss of weight during two weeks, 24½ lbs; urine voided, 238 ounces, or 7 quarts and 14 ounces; 336 hours without food; 300 hours without water, excepting 8 ounces. Loss of weight the second week, 10 pounds, of which 7 pounds 4½ ounces were thrown off in urine, leaving 2 pounds, 11½ ounces to be thrown off by the skin and lungs, during the time no water was taken.

Fifteenth Day.—The fifteenth day, and third week of the fast began at noon, July 12th. The doctor called more frequently for wet sponge, than on any previous day. He also held ice in his mouth a large part of the time, ejecting the water, as it accumulated in the mouth. The symptoms were decidedly unfavorable. This was the only time during the fast that any evidence of cerebral disturbance was manifest. Even now, it was unnoticeable to a casual observer; but to one who watched him closely from the start, the extreme languor and forgetfulness he manifested, showed too plainly that his abstinence from food and water, together with the mental annoyance he had endured, were telling

fearfully upon him. The writer urged him to take water, but he would not agree to do so. Finally, he promised he would resume the water, if he did not feel better the following day. On the morning of the 13th, he was still prostrated, and suffered much from the heat, but noon came, and thus the fifteenth day passed without his taking water.

He was watched during the day, by Drs. Price, Wilder, Reiley, Foote, Jr., Whitney, Peirce, Griswold, Wilson, Danelson, students Kinne, Watson, Brash and Plunkett, and the *Herald* watch.

At various times during the day the pulse varied as follows: 107, 98, 102, 100; temperature, ranged from 97½ to 98°; respiration, 16; urine voided, 17 ounces.

. Sixteenth Day.—The sixteenth day began at noon, July 13th, and found the doctor nervous and irritable, and very sensitive to the slightest noise. He requested the watchers to bathe his feet in cold water, and he required a towel wet in ice water, kept constantly on his head. At 3:40 P. M., he called for water and said he would drink it. During the next half-hour he drank 10 ounces. After drinking the water, he said to Dr. Wark that he felt better. alarmed about me," he continued, "I understand the condition of my system, and shall come out all right." Those present thought differently, but subsequent events proved he was correct. During the afternoon he drank water frequently, and the change produced was really wonderful. He took his first drive to Central Park, and returned at 8:30 P. M., looking and feeling like another person.

He retired at 9:30 p. m., and slept better than he had for several days. On awaking in the morning, he looked bright and cheerful, the irritability of the few days previous had entirely disappeared, and he almost entirely dispensed with the use of the wet towels and sponges.

The watchers during the sixteenth twenty-four hours,

were Drs. Danelson, Reiley, Wark, Tuttle, Molesworth, Griswold, Price, Allen, Marsh (druggist), students Watson and Plunkett, and *Herald* watch, all of whom expressed surprise at the great improvement wrought in the doctor by drinking the water.

On the morning before taking water, the pulse registered 108, and afterward fell to 95. The temperature was 98½°; respiration, 14; weight, 132 pounds; water drank, 29½ ounces; urine voided, 19½ ounces.

It will thus be seen that for thirteen days the doctor abstained from water, as well as food, excepting the four ounces taken after the Bradlev disturbance.

Seventeenth Day.—At noon, July 14th, the seventeenth day of the fast began, with the doctor in good condition. He was cheerful and talkative, and the symptoms of forgetfulness had entirely disappeared. The visitors were numerous, and several of them favored the doctor with music, which he enjoyed very much.

During the afternoon he again drove to Central Park accompanied by his watchers, and expressed himself as very much refreshed, on his return. He found he could procure spring water near the park, and had a demijohn filled. From this time he drank this instead of Croton water.

Having expressed a desire to drive to the park twice a day, arrangements were made for his doing so.

The watchers for the seventeenth twenty-four hours wore. Drs. Price, Danelson, E. P. Miller, Peirce, Hofmann, Reiley, Badham, Wark, Earl, Griswold, Valliant and Wilder.

The pulse ranged from 80 to 88; temperature, from 98% to 99%; respiration, 14 on evening of 14th, and 16 on morning of 15th; water drank, 77% ounces; urine voided, 22% ounces; weight at 8.55 P. M., July 14th, 133% pounds, and at 11 A. M., July 15th, 135% pounds; a gain of two pounds since he began drinking water.

Eighteenth Day.—During the eighteenth day, which began at 12 o'clock, noon, July 15th, the doctor was watched by Drs. Wilder, Sullivan, Price, Peirce, Kunzé, M. N. Miller, Van der Weyde, Begen, Leonard, Dewey, Gunn, Griswold, Danelson, students Plunkett and Watson, and Herald watch.

A number of professional singers called and sang for the doctor, to his great satisfaction. He was also presented with many beautiful bouquets.

He took two drives to the park, and, on returning, on the evening of the 15th, he remarked: "These rides give me new life, and conclusively prove to me the sustaining power of pure air. The truth is, we pay too little attention to the value of air and water as life sustainers."

The pulse ranged from 70 to 82; temperature, from 98° to 984°; respiration, 15; water drank, 51 ounces; urine voided, 364 ounces; weight, 1364 pounds, an increase of another pound in twenty-four hours, from the excess of water drank.

Nineteenth Day.—During the nineteenth day, the watchers were Drs. Price, Wark, Peirce, Hoeber, Tuttle, Campbell, Badham, Block, Danelson, Griswold, students Kinne, Plunkett and Egan, and Herald watch.

The doctor was bright and cheerful, and gave no signs of suffering from starvation. He took his morning and evening drives, received the usual number of floral offerings, enjoyed the volunteered concerts improvised for his benefit, and was stared at by the usual number of visitors. His mind was clear and active, and he argued with his watchers on various medical questions, and made his usual pertinent criticisms on the published reports of his experiment.

The pulse ranged from 76 to 84; temperature from 984° to 99°; respiration, 15; water drank, 464 ounces; urine

voided, 26½ ounces; weight, 136 pounds; dynamometer,* 80 kilogrammes in each hand; and the esthesiometer † showed increased perception of feeling in fingers.

Twentieth Day.—July 17th, at 12 o'clock, noon, the twentieth day began. The watchers during this day were Drs. Price, Hoeber, Reiley, Hofmann, Goodman, Molesworth, Badham, Griswold, Danelson, Earl, student Egan, and the Herald watch.

The excellent mental and physical condition of the faster was remarked by every one who saw him, and many who had previously doubted his ability to accomplish his forty days, began to think it possible for him to do so.

Singers entertained the doctor, and on one occasion, he was so pleased, that he vigorously clapped his hands, and called loudly for them to go on, with a strength and spirit that surprised every one present.

He took his usual rides, wrote two letters to friends, read the papers, or had them read to him, and seemed remarkably cheerful throughout the day. Toward noon on the 18th day, he said to the writer, "Well! half the time is now over, and I am not dead yet. I think it about time for scientific experts to stop predicting my death, for they don't know much about physiology after all their claims. I am in a better condition to-day than I was on the same day of my previous fast, and I am confident I can go through without the least trouble."

At one time during the day, he walked fifteen times around the hall, a distance of nearly half a mile, at a rate of speed that made it difficult for student Plunkett to keep up with him.

The pulse recorded 80 and 82; temperature, 98½ and 99°;

of the sensitive nerves.

^{*}Dynamometer is an instrument used to test muscular strength, and a kilogramme is a little over 2½ pounds.
†Esthesiometer, an instrument for testing the degree of sensibility

respiration, 15; water drank, 39½ ounces; urine voided, 45 ounces; weight at 4:40 p. m., July 17th, 135½ pounds, and at 5:15 A. m., the 18th, 135 pounds.

Twenty-first Day.—The twenty-first day began at 12 o'clock noon, July 18th. The watchers during the day, were Drs. Danelson, Earl, Wilson, Peirce, Wark, M. N. Miller, Westcott, Reiley, Whitney, Price, Wilder, student Block, and Herald watch.

In the afternoon, he walked from the hall to 6th Avenue, a distance of over half a mile, and thence rode to a photograph gallery, walked up three pair of stairs, and sat four times for his photograph; after which he returned to the hall in a carriage.

Immediately on his return he laid down on his cot, and was soon asleep. He was bright and cheerful, however, when he awoke, and took his usual drive.

Sphygmographic * tracings of his pulse were taken, which showed good volume and regularity.

The pulse ranged from 80 to 84; temperature, from 98% to 99°; respiration, 14; water drank, 51 ounces; urine voided, 33 ounces; strength, 75 kilogrammes, both hands; weight, 135 pounds; tactile sensibility and hearing, more acute than the majority of the watchers; mind, clear and active.

At noon, July 19th, the third week of the fast ended, with a total loss of 22½ pounds, but without the appearance of any symptoms of starvation, or any symptom that indicated collapse.

Twenty-second Day.—The twenty-second day of the fast began July 19th, at 12 o'clock, noon. He took his usual rides, morning and evening, and enjoyed them. His sleep

^{*} The Sphygmograph is a delicate instrument that makes a tracing by which the force, volume, and regularity of the pulse can be recorded, and kept for future reference.

was broken, and he seemed rather restless most of the time. Bouquets were presented to him in large numbers, and he always had a pleasant word for the donors. He talked freely with his watchers, but did not feel inclined to talk with strangers. During the day, his watchers were Drs. Wilder, Ellerson, M. N. Miller, Valliant, Hofmann, Danelson, Wilson, Reiley, Wark, student Egan and Herald watch.

Examination showed the pulse to be 72; temperature, 99°; respiration, 15; strength, 82 kilogrammes in each hand; sphygmographic tracings show pulse with fair volume and force; water drank, 18½ ounces; urine voided, 29 ounces; weight, 134 pounds.

Twenty-third Day—At noon, July 20th, the twenty-third day commenced, and at that time the doctor was seated at a table writing. He wrote four long letters without resting, and then laid down on his cot. Several visitors who had seen him at the end of the first week, were surprised to see so little change. He requested that visitors be allowed to go into the gallery to see him, and he talked with a number of them. He also had a long conversation with Prof. Wilder, and later, with the Herald reporter. He frequently requested gentlemen to stand aside to make room for visitors.

During his ride on the afternoon of the 20th, he complained of the oppressiveness of the atmosphere, and said the ride did not refresh him as usual. He, consequently, was restless and somewhat irritable during the evening. His ride next morning, however, refreshed him, and he returned to the hall bright and cheerful.

Once, in conversation with Dr. M. N. Miller, he asked a number of physiological questions, and wished to know his opinion concerning the application of electricity after certain nerves had been cut. He talked as earnestly and intelligently on all medical questions, as if he had just dined with his professional brethren.

The watchers during the day were Drs. Reiley, Wark, Price, Dewey, Ellerson, Hoeber, Wilson, Tuttle, Allen, Griswold, Peirce, Sullivan, students Egan and Watson, and Herald watch.

The pulse ranged from 85 to 88; temperature, 98° to 984°; respiration, 15; strength, 84 kilogrammes in each hand; sphygmographic tracings good; water drank, 231 ounces; urine voided, 301 ounces; weight, 1331 pounds.

Twenty-fourth Day.—The twenty-fourth day commenced July 21st, at 12 o'clock noon. The doctor took his usual drives, and enjoyed them. During the ride on the morning of the 22d, he was especially cheerful, and asked for information regarding the buildings, and places of interest in the park passed on the way. He was somewhat restless during the day, and frequently went from the gallery to the front room on the floor below. Once he walked three times around the hall, and then sat down inside the railing to give visitors a chance to see him. He went up and down stairs without assistance, as he did every day previously, and he seemed to make no effort in doing so. He requested Dr. Griswold to write some letters for him, from his dictation, which was done. His mental activity is in no way impaired, his evesight unaffected, his voice strong and natural, while his hearing seemed more acute than when he commenced. was very sensitive to the odor of tobacco, and frequently complained that the hall was filled with smoke from the cigars visitors held in their hands.

The watchers during the day were Drs. Peirce, Chapman, Miller, Danelson, Goodman, Hoeber, Osborne, Wark, Reiley, Gunn, Griswold, Price, Ellerson, students Plunkett and Egan, and *Herald* watch.

The pulse ranged from 72 to 84; temperature, from 983 to 993°; respiration, 15; strength, 84 kilos. in each hand; sphygmographic tracings regular, but lacking in force and

volume; water drank, 30 ounces; urine voided, 211 ounces; weight, 132 pounds.

Twenty-fifth Day.—At 12 o'clock, noon, July 22d, the twenty-fifth day of the fast began. The doctor was inclined to enter into arguments with the reporters and others, and the physicians present had to caution him against thus using up his strength. He took his usual drive morning and evening. He retired for the night about 7 o'clock, and slept without awaking till after 1 A. M., in the morning. He then asked for water and again went to sleep. He arose at 5 A. M., and had slept longer than on any previous night.

After his morning drive he asked for the papers. He looked over them and then wished some one to read for him. He complained about the reports of his failing. He said, "If I talk much they say I must have taken nourishment; and if I am quiet and feel indisposed to talk then they have me failing fast. I am not failing, but feel as strong and well as I have any time in two weeks."

The watchers for the day were Drs. Ellerson, Wilson, Price, Molesworth, Cowl, Goodman, Pollitzer, Hoeber, Miller, Danelson, Begen, students Egan, and *Herald* watch.

Only one examination was made, when the pulse was found to be 72; temperature, 99°; respiration, 16; strength in right hand, 88 kilos., in left hand 84 kilos.; sphygmographic tracing lack force and regularity; water drank, 16 ounces; urine voided, 19½ ounces; weight, 131½ pounds.

Twenty-sixth Day.—At 12 o'clock, July 23d, the twenty-sixth day of the fast began. He took his usual drives, received a large number of visitors, and talked with several who presented him with flowers. He expressed a wish to have his mail handed to him as soon as opened and examined by the watchers, as he wished to read his own letters before others saw them.

Before taking his evening ride he seemed weak and depressed, and was very restless, but he returned much refreshed. He slept well during the night, and arose before 5 o'clock in the morning. During the forenoon of the 24th inst., he complained of nausea, but said he suffered more in that way during his forty-two days' fast in Minneapolis, than he had here. Dr. Wark recommended that he should drink some hot water, which he did, and felt much relieved.

When his morning mail arrived, he arose from his cot and spent over an hour reading his letters. Many of them he read carefully and kept, yet he threw away the majority from him impatiently, saying they were not worth reading. He conversed on various subjects with his watchers, and showed no sign of impaired mental vigor.

He was watched during the twenty-sixth twenty-four hours by Drs. Danelson, Reiley, Wark, Price, Wilson, Hofmann, Briggs, Kunzé, Goodman, Miller, Osborne, Sullivan, Tuttle, students Plunkett and Egan, and *Herald* watch.

The pulse ranged from 67 to 72; temperature, constant at 98%; respiration, 16; strength with right hand, 80 kilos., with left hand, 79 kilos.; esthesiometer showed increased sensibility at the tips of the fingers, and at wrist; the syhygmographic tracings showed regularity and fair volume, but deficiency of force; water drank, 16 ounces; urinated 19½ ounces; weight, 131½ pounds.

Twenty-seventh Day.—At noon, July 24th, the twenty-seventh day of the fast began. The doctor talked with many of his visitors, and at one time administered a sharp rebuke to a number of them, for asking him foolish questions. He took his evening drive, as usual, but did not enjoy it. He laughed and joked with the reporters, and conversed earnestly with his watchers at different times during the day. Whenever he felt tired talking, he would say, "You must excuse me from talking, as I must save my strength."

It was on this day that he expressed his views on Spiritualism and his religious belief to the reporters, with the request to publish them. His statement was substantially the same as that given at the close of Chapter I., in this volume, which gives a biographical sketch of the faster.

He slept well during the night, and seemed bright and cheerful when he awoke. After dressing, he walked with his watchers to and around Union Square, and on his way back to the hall stopped at a barber shop to get shaved. He felt the air oppressive, and said he could not get a full breath.

He was watched during the day by Drs. Valliant, Eastman, Price, Reiley, Winterburn, Gunn, Hofmann, Griswold, Danelson, student Egan, and *Herald* watch.

The pulse ranged from 74 to 76; temperature, from 98 to 98%; respiration, 14; strength, 80 kilos. in each hand; sphygmographic tracing show a fair fullness and volume; water drank, 12 ounces; urine voided, 16 ounces; weight, 1304 pounds.

Twenty-eighth Day.—The twenty-eighth day of the fast began at 12 o'clock, noon, July 25th. The doctor slept well during the night, and took his usual morning drive, which he enjoyed very much. On his return, he talked with the writer on various subjects connected with his fast, and remarked, that he would have many things to talk about when he got through. He walked around the hall, and up and down stairs, with a firm elastic step, and said he felt better when he took some exercise.

The watchers for the day were Drs. Danelson, Reiley, Wark, Gunn, Tuttle, Whitney, White, Marsh (druggist), Peirce, students Plunkett and Egan, and *Herald* reporters.

Only one examination was made, which showed: pulse, 72; temperature, 984°; respiration, 16; strength, 82 kilos. in each hand; sphygmographic tracings, regular, but lack-

ing force; tactile sensibility, perfect; water drank, 20 ounces; urine voided, 9% ounces; weight, 129% pounds.

Twenty-ninth Day.—At 12 o'clock, noon, July 26th, the doctor entered on the twenty-ninth day of his fast. He took his usual drives in the evening, but he felt it did not do him much good, as the atmosphere was heavy. He held a conversation with a physician from Cleveland, Ohio, during which he related the facts of a case he treated in which the other physicians had been over-feeding her, and thus keeping her sick.

He seemed exhausted after his drive, and was very irritable, refusing to talk with any one.

He laid down on his cot at 8.15 P. M., without undressing, and soon fell into a sound sleep. At 9:45 he awoke and asked for water, after which he felt nauseated, and finally he vomited some mucous and bile; after this he slept better, and awoke at 5:20 A. M., on the 27th, and started for his morning ride. He received a large number of visitors, read his own mail and a few of the morning papers, and then requested some of the watchers to read for him.

He was watched during the day by Drs. Leonard, Vaillant, Hofmann, Ellerson, Price, Griswold, Wilson, Danelson, and Herald reporter.

Pulse, 74; temperature, 98%; respiration, 16; strength, right hand, 89, left hand, 79; sphygmograph, about the same as previous days; water drank, 16 ounces; urine voided, 21% ounces; weight not taken, as he felt tired and declined to be weighed.

Thirtieth Day.—On the thirtieth day, the doctor complained of feeling the heat, and asked for a wet sponge to dampen his face and head. At about 4 o'clock several visitors favored the doctor with vocal and instrumental music, which he enjoyed very much, and applauded loudly. The Spanish students also came in and sang for the doctor. He slept well during the night, and awoke at 4:55 A. M., and went for his usual ride.

At 9:15 A. M., he walked around the large hall 25 times in 14 minutes, which made over a mile. His step was firm, elastic and quick. When he got through he said he did not feel fatigued, and that in the future he should walk more.

He was watched during the day by Drs. Danelson, Winterburn, Wark, Reiley, Vaillant, Molesworth, Foote, Jr., Griswold, students Plunkett, Egan, and Watson.

Pulse 84; temperature, 984°; respiration, 14; strength in left hand, 80 kilos., in right hand, 85 kilos.; sphygmographic tracings about the same as usual; weight, 130 pounds, a gain of ½ lb., which may be accounted for by the excess of water drank after he was weighed on that day.

Thirty-first Day.—The thirty-first day began at 12 o'clock, noon, July 28th. The doctor spent the greater part of the afternoon in the enclosure in the main hall. At about 8 o'clock he walked the circuit of the hall fifteen At 9 o'clock he returned to the south gallery, and soon after retired. At 9:45 he had considerable eructations of gas, attended with nausea, which soon resulted in his vomiting some water and mucous, tinged with bile. He asked to have the rubber blanket spread over him, and for hot water to drink. At 10:50 P. M., an "alcohol sweat" was administered, after which he felt much relieved. He soon went to sleep, and with two slight interruptions slept till 5:35 A. M. At 6 o'clock in the morning, in company with his watchers, he walked up 4th Avenue to 26th Street, thence west to Madison Square, and after resting a few minutes walked back to the hall, a distance of about a mile and a half.

He was again troubled with nausea, and asked for a hot foot bath, which was given him.

On some of the watchers suggesting that he should take nourishment, he said, "No, this nausea does not alarm me, I expected it, and so long as hiccough does not set in I am all right."

Before the close of the day he again walked several times around the hall.

The watchers for the day were Drs. Danelson, Wark, Reily, Grover, Firth, Gunn, Moore, Griswold, Price, student Egan, and *Herald* Watch.

Pulse, 64; temperature, 98%; respiration, 14; water drank, 11½ ounces; urine voided, 9 ounces; strength in right hand, 80, and in left hand, 85 kilos; weight, 128 lbs. The sphygmographic tracings continued to show lack of force and volume, but were, on the main, regular till the end of the fast.

Thirty-second Day—At noon, July 29th, the doctor entered upon his thirty-second day. For the first time he varied his diet by drinking three ounces of mineral water that had been sent him. At 6:45 p. m., he went out to 4th Avenue to get a bath and shave.

During the night he complained of the condition of the atmosphere, but spent a much more comfortable day than he had for several days. He was bright and cheerful, and conversed freely with those around him, and expressed confidence in his ability to complete his fast.

The watchers during the day were Drs. Peirce, Wark, Kunzé, Danelson, Hofmann, Tuttle, Marsh (druggist), Price, student Egan, and *Herald* watch.

Pulse, 72; temperature, 98%; respiratiou, 15; water drank, 12% ounces; urine voided, 10% ounces; strength, 81 kilos with each hand; weight, 127% lbs.

Thirty-third Day.—At noon, July 30th, the thirty-third day of the fast began. The doctor expressed great annoyance at the report that he was dead. He drank carbonic acid water frequently during the day, and thought it controlled his nausea.

He took his drives to-day, along the Riverside drive and through Central Park. He remained in the large hall parts of the afternoon and evening, and at nine o'clock addressed the visitors, and said it was time for them to retire.

He read many of the letters brought to him, and was much interested in an article on his case, published in the *American Medical Journal* of St. Louis.

The watchers for the day were, Drs. Price, Danelson, Winterburn, Wark, Reiley, Stone, Gunn, students Egan and Plunkett, and *Herald* watch.

Pulse, 78; temperature, 99°; respiration, 14; water drank, 14 ounces; urine voided, 15½ ounces; strength of left hand, 70 kilos., and right hand 80 kilos.; weight, 126½ pounds.

Thirty-fourth Day.—At noon, July 31st, the thirty-fourth day of the fast began. Nothing of special interest occurred during the day, except that, for the first time during the fast, the doctor complained of feeling badly. He remained lying on his cot most of the day. He drove to the park in the morning, but not in the evening.

The watchers during the day, were Drs. Stone, Peirce, Badham, Vaillant, Gunn, Mclesworth, Pollitzer, Allen, Griswold, Wilson, Reiley, Leonard, students Egan, Plunkett and Watson, and *Herald* watch.

Pulse, 78; temperature, 994°; respiration, 14; water drank, 8 ounces; urine voided, 124 ounces; strength in right hand, 86 kilos., and in left hand, 80 kilos.; weight, 1264 pounds.

Thirty-fifth Day.—The thirty-fifth day of the fast began at noon, Aug. 1st. The doctor vomited some mucous tinged with bile, several times during the day. Finally, a mustard plaster was applied over the stomach, which gave him great relief. On hearing some one say he would be in a bad condition when he began to take nourishment, he said, "I know better than that; as soon as I get some food in my stomach, this nausea will be gone." He called for wet towels to be applied to his head, four or five times during the day. He received a cablegram from Paris, signed Dr. Marion Sims, which seemed to please him.

The watchers for the day were, Drs. Wark, Peirce, M. N. Miller, Hoeber, Danelson, Hofmann, Goodman, Osborne, Badham, Wilson, Griswold, and *Herald* watch.

Pulse, 78; temperature, 98°; respiration not recorded; water drank, 16 ounces; urine voided, 10½ ounces; strength in right hand, 82 kilos., left hand, 81 kilos.; weight not taken.

Thirty-sixth Day.—At noon, August 2d, the thirty-sixth day of the fast began. The doctor's general condition was better to-day than for the past two or three days. He, however, wished his head covered with wet towels part of the day. He took his usual evening drive, and felt refreshed by it.

The watchers during the day were Drs. Griswold, Reiley, Vaillant, Grover, Firth, Wark, Goodman, Peirce, Wilson, student Plunkett, and *Herald* watch.

Pulse, 74; temperature, 99°; respiration, 15; water drank, 24½ ounces; urine voided, 14½ ounces; weight not taken.

Thirty-seventh Day.—At twelve o'clock, noon, August 3d, the thirty-seventh day of the fast began. He felt nauseated, and vomited a small quantity of mucous and bile.

He had wet towels and sponges applied to his head, several times during the day, and although he looked badly, he expressed himself as certain of completing his task. He however complained of being very much exhausted by the constant stream of visitors. A large watermelon was received by express, which seemed to please him

The watchers during the day were Drs. Peirce, Wilson, Eastman, Danelson, Gunn, Tuttle, Hoeber, Vaillant, Sullivan, Osborne, Goodman, Griswold, Stone, student Egan, and Herald watch.

Pulse, 74; temperature, 984°; respiration, 14; water drank, 12½ ounces; urine voided, 23½ ounces; strength, right hand, 82 kilos., left hand, 75 kilos.; weight, 125½ pounds; auscultation of heart and lungs showed both to be acting normally, though very weak.

Thirty-eighth Day.—The thirty-eighth day of the fast began at noon, August 4th. This was a trying day for the doctor. He suffered from nausea almost constantly, and vomited mucous and bile frequently. An "alcoholic sweat" was administered, which relieved him for a time, but the nausea soon returned. Several mustard foot-baths were also tried, which afforded some relief each time. He also required to have his abdomen and legs rubbed frequently.

A large number of visitors were present during the day, and he directed that they should be allowed to go into the south gallery to see him. When they were inclined to linger, he would order the gallery cleared.

The watchers for the day were Drs. Danelson, Bagg, Reiley, Molesworth, Gunn, Wilson, Vaillant, students Plunkett, Egan, and *Herald* watch.

Pulse, 78; temperature, 994°; respiration, 15; water drank, 94 ounces; urine voided, 154 ounces; strength in right hand, 84; in left hand, 80 kilos; weight not taken.

Thirty-ninth Day.—At noon, August 5th, the thirty-ninth day of the fast began. During the first part of the day, the doctor suffered much from nausea and vomiting of mucous and bile, but before half the twenty-four hours had passed, he recovered, and looked well. He talked to his watchers, and expressed his pleasure at being so near through with his task.

He was visited during the day by over 600 people, and frequently went down to the lower hall to give them an opportunity of seeing him. He was bright and cheerful, even when he seemed to suffer the most.

He was watched during the day by Drs. Danelson, Reiley, Sisson, Wark, Tuttle, Marsh, Snowden, Griswold, Peirce, M. N. Miller, Sullivan, Goodwin, Pollitzer, Osborne, students Plunkett and Egan, and Herald watch.

Pulse, 82; temperature, 98%; respiration, 13; water drank, 20% ounces; urine voided, 6% ounces; strength with right hand, 79, with left, 78 kilos.; weight, 122% pounds.

Fortieth Day.—The fortieth and last day of the fast began at 12 o'clock, noon, Aug, 6th.

The watchers for the day were, Drs. Danelson, Reiley, Vaillant, Kunzé, Wark, Stone, students Egan and Watson, and Herald watch; and during the closing hours nearly all the watchers were present. The doctor was bright and cheerful throughout the day, though he sometimes showed evidence of weakness. He slept well during the night, and in the morning he said he was thankful that he only had six hours more to fast.

During all the forenoon visitors crowded the hall, and he cheerfully showed himself to all who came. He received numerous presents, and long before the closing hour, the tables inside the inclosure were loaded with watermelons, grapes, bottles of milk, prepared foods, and numerous presents.

By 11 o'clock, Aug. 7th, an hour before the end of the forty days, the hall was filled with an expectant and enthusiastic audience, anxious to see the enduring and patient doctor break his long fast. The doctor sat in the front room, off the main hall, surrounded by his anxious watchers, holding in his hand a ripe peach, presented to him by a little boy. He said that the peach would be the first thing to go into his stomach, and in spite of all the protestations from the attending physicians, he said he would eat it as soon as the clock struck twelve.

The street in front of the building was thronged by thousands of people; and presently, the noon-day whistle in the factory opposite began to blow, when cheer after cheer went up from the crowd on the street, and re-echoed by those in the hall. The peach had previously been peeled, and true to his word, he began eating it as soon as the sound of the whistle died away. As soon as he finished the peach he arose, waved his handkerchief to the crowd in the street, and then passed into the large hall. Dr. Vaillant played on the piano, but the music was drowned by the deafening cheers and wild enthusiasm of the audience.

As he entered the inclosure, he stepped nimbly on the tables arranged as a platform, seated himself in an easy chair and called for his milk. The milk he drank was brought in that morning by Dr. Huldah T. Campbell, direct from the farm of her father, Mr. Alfred P. Hulse, of Monroe, Orange County, New York.

While Dr. Wark poured out the milk the audience again cheered, and the doctor responded by bowing his head and waving his handkerchief. He drank nearly two goblets full, and he then remarked that he never had milk taste so good to him in his life. He immediately asked that the big Georgia watermelon be tapped. The physicians looked on in consternation, and several pressed forward to remonstrate with him, but to all he made answer, "You let me

alone. I have been through this before, and I know the condition of my stomach better than any one else. You are governed by theory, while I judge from experience." So he had his own way, and ate a large portion of the watermelon before he stopped.

It was now announced that he wished to leave the hall, which he did in a few minutes, surrounded by a shouting, enthusiastic crowd. He was specially gratified at this reception, and at the complete change of public opinion that had taken place in his favor, and as he drove away he remarked that this was the happiest day of his life.

Thus ended this wonderful fast, and the lessons to be derived from it will doubtless compensate the heroic doctor for all his suffering and sacrifice during the weary hours of the forty days and forty nights he went without food.

The following is a complete list of the watchers who had charge of Dr. Tanner's experiment, and all are prepared to certify under oath that the doctor took no food during their respective watches.

UNITED STATES MEDICAL COLLEGE WATCH.

Prof. David Wark, M.D.
Prof. P. H. Van der Weyde, M.D.
Prof. R. A. Gunn, M.D.
Prof. Alexander Wilder, M.D.
Prof. Louis de V. Wilder, M.D.
Prof. Charles E. Griswold, M.D.
Prof. W. L. Tuttle, M.D.
Prof. Mark Nivison, M.D.
Isaac H. Reiley, M. D.
J. Edwin Danelson, M.D.
A. E. E. Falkner, M.D.
Joseph R. Buchanan, M.D.
Joseph J. Goethals, M.D.
F. F. Stone, M.D.
E. P. Miller, M.D.

James Wilson, M.D.
James Neil, M.D.
Richard E. Kunzé, M.D.
G. L. Peirce, M.D.
W. H. Price, M.D.
A. B. Whitney, M.D.
Geo. Vaillant, M.D.
H. E. Earl, M.D.
James Began, M.D.
W. E. Leonard, M.D.
W. A. Dewey, M.D.
E. F. Hofmann, M.D.
O. Ellerson, M.D.
Walter T. Cowl, M.D.
E. L. Bagg, M.D.

United States Medical College Watch. — Continued.

James E. Briggs, M.D. W. Molesworth, M.D. E. S. Bates, M.D. Charles S. Allen, M.D. A. Y. Reid, M.D.

A. M. Eastman, M.D. Chas. Winterburn, M.D. J. R. White, M.D. E. S. Moore, M.D. C. A. Marsh, (druggist.)

MEDICAL STUDENTS.

Henry B. Plunkett, William A. Watson, Frost Johnson, J. H. Gerken, Arthur W. Brash,

J. E. Wright, J. William Egan, J. E. Wright, E. W. Kinne, Daniel Peirce.

WATCH OF THE ALLOPATHIC (SELF-STYLED "REGULAR") PHYSICIANS.

c -

J. J. Goodman, M.D.

R. T. Osborne, M.D. J. T. Badham, M. D.

J. F. Sullivan, M.D.

S. C. Pollitzer, M.D.

M. N. Miller, M.D.

E. W. Hoeber, M.D.

H. C. Cooper, M.D.

N. G. McMasters, M.D.

G. M. Weeks, M.D.

N. S. Westcott, M.D.

Ed. D. Harwood, M.D. G. W. Bradley, M.D.

Wm. C. Jarvis, M.D.

H. B. Kent, M.D.

Geo. W. Miller, M.D.

CHAPTER V.

AFTER THE FAST.

After Dr. Tanner completed his fast, he upset all the theories, and confounded the doctors by the amount and character of his first meal No diluted milk in small quantities for him; but instead, as has been seen, peaches, milk and watermelon. The nausea from which he suffered so constantly during the last few days of the fast, instead of being increased, as the doctors believed it would be, was at once allayed as he himself predicted.

During the first twenty-four hours he ate something every hour or two, and insisted on having what he called for. His bill of fare varied as follows, after leaving Clarendon Hall: watermelon in large quantities, milk, apples, beef steak, which he chewed, and only swallowed the juice at first, beef tea, potatoes stewed in milk, several beef steaks, Hungarian wine and English ale. Everything he ate tasted good to him, and he did not have the slightest evidence of nausea, or distress at the stomach. He claimed that everything was promptly digested and absorbed.

He was specially pleased with the Hungarian wine, of which he drank freely. He said it seemed to give new life to his nervous system, and that was just what he required. This wine was of the Tokayer Ausbruch brand, vintage of 1866, and is a pure medicinal wine, containing considerable quantities of the phosphates, and is imported only by L. Reich, 13 West 11th Street, New York.

At 11:30 A. M., August 8th, there was an action of the bowels, for the first time in forty-one days. It gave him no inconvenience, and of itself proved that no food had been taken. At noon, Aug, 8th, the doctor weighed 1261 pounds,

a gain of five pounds since he broke his fast; and again at six o'clock, he turned the scales* at 130 lbs., thus gaining eight and one-half pounds in thirty hours. At this rate it will not be long before he regains all he lost in weight during the fast.

He slept well during the night after leaving the hall, and on Sunday was as bright and cheerful as any of his attendants. He said he would be able to go out on Monday, and if necessary, he could attend to business.

He was much annoyed by the statement of some of the papers that he had been nourished by alcoholic vapor baths, and wished to write a communication denying it. It is but just to say in regard to this statement, that he took no vapor bath at any time. He had on three occasions an oldfashioned "alcohol sweat." An alcohol lamp was lighted, and placed under the chair on which the doctor sat, and a rnbber blanket was wrapped around him to retain the heat. till perspiration was produced. We will be much obliged to the scientists (?) who write the editorials for some of our leading (?) papers, if they will inform us how much nourishment Dr. Tanner could get by sitting ten minutes over a burning alcohol lamp. This statement is in keeping with many others emanating from the same sources, and can have no influence in determining public opinion as to the value of the fast or its genuineness.

A review of the records of the fast gives us valuable statistics which are arranged in tabular form on the next page, for the convenience of the reader.

^{*} The scales on which Dr. Tanner was weighed, were kindly furnished by the Marvin Safe and Scale Co., and were found to be mathematically correct.

ئد		Pul	se. `	Tempe i F. de	n.	•	ounces of lrank.	ounces of oided.	met	amo- er in los.
Day of Fast.	Weight.	Highest.	Lowest.	Highest.	Lowest.	Respiration.	Number of ounces Water drank.	Number of ounces Urine voided.	Right Hand.	Left Hand.
1st	157 	88 84 78 84 100 90 90 96 100 107 108 98 82 84 72 76 72 77 78 78 78 74 74 78	82 84 84 86 89 72 77 88 89 89 89 89 89 89 89 89 87 76 74 72 74 74 77 78 78 74 77 78	99 98 \$ 98 \$ 98 \$ 98 \$ 98 \$ 98 \$ 98 \$ 9	99989999999999999999999999999999999999	16 16 16 14 13 16 14 13 16 15 15 15 15 16 14 15 15 15 15 15 15 15 15 15 15 15 15 15	56 20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	17 13 22 1 17 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	82 84 84 84 80 80 80 80 80 80 80 80 80 80 80 80 80	82 84 84 84 84 84 85 89 80 81
89th 40th	122÷ 122	82 92	82 82	99	98 1 82	18 17	20 1 18#	7 9½	79	78

Close of Fast, weight, 121½ lbs.; pulse, 99; respiration, 19.

It will thus be seen that the total loss of weight was 36 pounds; total amount of water drank, $681\frac{7}{4}$ ounces, or $42\frac{5}{4}$ pounds; total amount of urine voided, $738\frac{3}{4}$ ounces, or $46\frac{3}{16}$ pounds; highest pulse 116; lowest pulse 66; highest temperature, $100\frac{4}{9}$ °; lowest temperature, $97\frac{4}{9}$ °; greatest strength, 196 pounds; lowest strength, 156 pounds.

A few hours after the fast was completed, Prof. Van der Weyde sent in the following communication, which he intended simply to give the general results of his chemical examinations, reserving his full report for publication in some medical journal.

New York. August 8th, 1880.

To Robert A. Gunn, M. D.,

Dear Doctor:—I herewith send you a hurried statement of the general results of my examinations of urine, etc., in Dr. Tanner's case, and at a later day will send you a more minute report of all the examinations made by me.

Respectfully yours,

P. H. VAN DER WEYDE.

DR. VAN DER WEYDE'S REPORT.

Some of the substances necessary for the functions of life are consumed in large quantities, others in small quantities. In a case of starvation the first kind are of the most importance, as their exhaustion brings life in immediate danger. They are the carbonaceous, nitrogenous and phosphatic compounds; the first, the carbonaceous, are consumed in keeping up the animal heat throughout the whole body; the second, the nitrogenous, are consumed by the action of the muscles, some of which, such as those of respiration and the heart act day and night; the third, the phosphatic, are consumed by the action of the brain and nervous system. The consumed carbon is eliminated in the form of carbonic acid by the acts of respiration and perspiration; the other two, the nitrogenous and phosphatic

compounds are eliminated by the kidneys in the form of urea, and the triple phosphates of lime, magnesia and ammonia.

In order to make Dr. Tanner's fast serviceable to science if possible, it was concluded to add to a careful watching and attendance to his comforts, a record of the amount of water he daily drank and voided, with a chemical analysis of the latter, so as to keep a record in how far the urea and phosphates eliminated by the kidneys were influenced by To do this in regard to the carbonic acid exhalated by the lungs and perspired by the skin, as was recently proposed that should have been done, is impractical, and besides it would be useless, as the temperature of the body gives a direct index if the normal quantity of carbon is consumed and carbonic acid expelled, or not. There is no. doubt that no important change has taken place in this respect, as the temperature of Dr. Tanner's body has never oscillated beyond 98° and 100°, and was, most of the time, between 98% and 99%, as is the case with every healthy individual, and this must be accounted for by the copious layer of adipose tissue seen around his body when he was stripped and examined at the beginning of the fast, and which at once satisfied the subscriber, that in this respect Dr. Tanner was all right, and possessed sufficient fat to furnish fuel for the maintenance of animal heat for forty days at least.

Then he was found to have a strong wiry constitution, being in stature below the average, but in weight, far above the average for his size; so the subscriber was confident from the beginning that he would succeed, and in becoming further acquainted, was soon convinced of his integrity and strict honesty, being too high-toned a gentleman to resort to tricks as vulgar as would be surreptitiously taking food, while he was pretending to fast.

The only doubt was in regard to the other two main in-

gredients, the nitrogenous and phosphatic compounds which, as remarked, are eliminated in the form of urea and triple phosphates, and for this reason the almost daily examination of the urine was undertaken with a great deal of interest.

In order to determine the amount of urea, the method of analysis selected from the different processes followed by Berzelius, Lehman, Bunsen, Millon, etc., was a modification of Lehman's process, consisting in a concentration of the liquid by evaporation, filtering to eliminate the deposit of phosphates, etc.; then a saturated solution of oxalic acid is added to the clear liquid, when a precipitate is formed, consisting of impure oxalate of urea. As the purpose was not to manufacture pure urea, but only to determine changes in the quantity, the operation stopped here, and after the quantity of oxalate of urea once obtained had been determined by the balance, and the amount of urea calculated herefrom, the same standard solution served for future determinations, by observing how much oxalic acid was required to precipitate the urea present.

The quantity of liquid used for the examination which was made sometimes daily, and sometimes every second day, was twenty cubic centimetres, the amount of urea in this sample, was found on the day the fast began, to be 1,074 milligrammes; but as on this day 17 ozs., that is 544 cubic centimetres had been voided, of which 20 centimetres is the 27th part very near, we have to multiply the 1,074 milligrammes with 27, which gives 28.998 milligrammes or 29 grammes very nearly.*

The same method was followed for every other day that an analysis was made, and the results are embodied in the following list given in round numbers.

^{*} One milligramme is 200 grains.

One gramme is 15 grains.

One fluid ounce is 32 cubic centimeters.

Amount of Urea eliminated	Day	Amount of Urea eliminated.
29	23d	9
22	26th	8.5
17	28th	9
16	29th	7.5
15	31st	7
12	35 th	7
12	37th	6.5
10	38th	7
8.5	39 th	6
	29 22 17 16 15 12 12 10	Pay Pay

The apparent slight increase of urea some days must be simply accounted for by an uncertainty in the estimate of the amount of urine voided, which was hurriedly prepared from the record for my use. The detailed record of the amount of urine voided at different hours of the day and night, when carefully examined, will doubtless correct this slight increase of urea noticed on two of the days. Any slight error in adding up the quantity of urine voided would affect my estimate of the quantity of urea. I always obtained the quantity of urea in 20 cubic centimeters of urine, and by multiplying that amount by the number of centimeters of urine voided in 24 hours, and divided by 20, I obtain the quantity of urea eliminated in the same time. The quantity contained in 20 centimeters varied largely in proportion to the concentration of the urine on different days.

The subscriber regrets that other business occupations only allowed him to make the analysis in a kind of approximate manner; but enough has been done to show what might have been expected; namely, that in the ordinary condition of man, the amount of urea depends upon two sources of supply—the waste of the system, and the excess of nutrition—while in the case of an absolute fast, the latter source of supply being cut off, the urea represents the waste of the system alone, necessary to keep up the functions of life.

It is seen also, that if in the meantime, nourishment had been taken of such a kind as would benefit the faster; for instance, beef extract, eggs, milk, or their equivalents, it would at once have increased the amount of urea secreted, and have brought it back to the ordinary quautity; so that in this case the analysis has played the part of a very reliable detective, and vindicated the honesty of the faster.

It shows also another, it is believed, new fact, namely, that after the period of two weeks had been reached, the limit ordinarily supposed to be the extreme which can be reached, bountiful nature makes a second reduction in the urea secreted, so as to economize the nitrogenous compounds in the body, after first reducing its elimination 65 per cent., causes for the rest of the test a second reduction which finally reaches about 80 per cent.

In regard to the phosphates, they were simply observed under the microscope in the deposits, and their comparative frequency estimated by the number of crystals appearing in the field among the cells of mucus. When several slides are prepared from every sample under examination, a very fair estimate may be made, in regard to the increase or decrease of the phosphates from day to day. This method was resorted to for want of time to go into a chemical analyses, and it answered the purpose.

There was at first no decrease of them, as was the case with the urea, and on the fifth and sixth day even an increase; part of this was due to the fact, that the faster had been abstaining from drinking water, which had decreased the quantity of liquid voided, and increased its concentration, but also to the activity of his mind, which had been worried by some unpleasant encounters.

The fact was mentioned to Dr. Gunn, and some recreation suggested, so as to ease the mind of the faster as it was feared that a continuous drain of the phosphates would exhaust the nervous system very soon, and that herein was

the greatest danger. Recreation was provided by carriage rides, etc., and since that time the crystals of phosphates in the deposits have considerably diminished. Here also, nature was economizing the supplies of the faster.

It should also be mentioned that at the first day the characteristic crystals of oxalate of lime were very numerous, and that they entirely disappeared the third day; as the presence of this substance is a common accompaniment of dyspepsia, it showed that the dyspeptic tendency of the system entirely disappeared by the fast, and that occasional absolute rest of the stomach may be beneficial to dyspeptics.

At the last hour of the fast, a microscopic examination was made of the blood of Dr. Tanner at the suggestion of Dr. Gunn. The subscriber brought his microscope to the college, and used a No. 10 Hartnack immersion lens, with eye-piece No. A. To his surprise the blood corpuscles had most all a ragged appearance; they had shrank below the average size, while the amount of white corpuscles, which usually is \(\frac{1}{2}\) of one per cent., had increased to one per cent.—a dozen showed themselves in a field containing some 1200. These were, in general, smooth, but in some instances clotted together, while the red corpuscles were separate, and besides the raggedness, showed an irregularity of shape strongly contrasting with healthy, normal corpuscles, of which scarcely any were seen.

The principal cause of the ragged form appeared due to a fungoid growth over their surface, which showed itself in pointed projections, of which every corpuscle had some twenty or more around its border. It appeared as if these fungoid spores flourished at the expense of the corpuscle covered by it, and gradually caused its disintegration.

The sample of this blood preserved will serve for a further study of the subject, for which, while this report is going to press, there has been no opportunity.

A sample of 20 cubic centimetres of urine obtained

24 hours after the close of the fast, since which time Dr. Tanner has taken copious food, was found to contain 750 milligrammes of urea. As the total quantity of urine voided in 24 hours was 17 ounces or 544 cubic centimetres, of which 20 centimetres is the 27.2 part, the 750 milligrammes have to be multiplied with this number, which gives for the total amount of urea secreted during the 24 hours succeeding the end of the fast, 750x27.2, or 20.2 grammes, which shows that after the partaking of food, the amount of urea secreted, (which at the end of the fast had been reduced to an average of 6.5 grammes in 24 hours), was raised to 20 grammes, and was thus at once more than tripled.

P. H. VAN DER WEYDE, M. D., Prof. Chomistry, United States Medical College.

CHAPTER VI.

DEDUCTIONS.

The question, "What will it prove?" has been so frequently asked since the beginning of Dr. Tanner's wonderful fast, that a history of this kind would be incomplete if the question was not answered.

In our opinion it proves and disproves many things that the public and medical profession are not willing to admit. And besides it opens the door for a vast amount of study in the departments of physiology, psychology and hygiene.

It is impossible at this time to calculate the benefits conferred upon humanity by the self-sacrifice Dr. Tanner has subjected himself to; and the most we can do is to suggest such benefits as appear to us at first sight, and to carefully compare the facts developed by this case, with the common-

ly accepted theories of physiology.

The first conclusion we are forced to is, that the medical profession have yet much to learn, and that arrogant assumption which is so common in their ranks, should give place to a spirit of tolerant investigation of every new subject that presents itself for their consideration. At first nearly all the prominent physicians throughout the country declared that a man could not fast forty days; that reported cases of such fasting was not authenticated, etc. when it became apparent that Dr. Tanner was likely to succeed, they said it proved nothing, that many such cases were on record, and they had been of no benefit to science. A man might fast forty days, they said, but his digestive organs would be so impaired, that as soon as he began to take food, inflammation of the stomach must set in, and death ensue. Some even declared that the mucus membrane of the stomach was already, or soon would be, destroyed by the action of the gastric juice, and death must necessarily follow.

In spite of these opinions, however, Dr. Tanner began to eat without any of the serious trouble predicted for him; but on the other hand everything turned out as he himself said they would. He did not accept the teachings of the books, nor the authority of the so-called leading men in the profession. On the contrary, he had experimented for himself, and was certain, from absolute knowledge, what he could do. So, instead of the unknown "irregular" doctor from Minneapolis learning from the medical scientists of the world, he has demonstrated that they are all in error, and must begin to study anew.

Scoffs and jeers will not answer now. Facts must necessarily upset all theories, and those who gracefully acknowledge their errors and are willing to learn the truth are the true scientists.

We claim that this fast must add greatly to our knowledge of the management of certain kinds of diseases. First, it disproves the utility of administering foods by injections into the rectum (lower bowel). This absurd practice has long been in vogue, and milk, beef tea, brandy, etc., have been constantly administered in this way; and because the patient lived a few weeks, the conclusion was jumped at, at once, that the food thus introduced kept him alive. The truth of such cases, however, is that the patient lives on his own tissue, as Dr. Tanner did, and that food thus introduced often excites inflammation from which the patient dies. This has been the opinion of the writer for years, and he has both spoken and written against the practice.

It has been the custom of the profession to insist upon food being taken by persons suffering from various forms of indigestion, and diseases of the stomach and bowels. Now, that it is proved that a person can live forty days without food, there need be no fear of starvation if a patient is directed to go some days without eating. This would give the diseased organs a chance to rest till nature corrected the difficulty, and then the functions could be normally performed, the same as if they had not been impaired. On this point Dr. Tanner had made numerous experiments before he attempted a long fast, and demonstrated in his own person that fasting was the best treatment for all derangements of the digestive organs.

With a general knowledge of the power of man to endure long fasts, persons who are ship-wrecked or otherwise deprived of food, would live longer than they do at the present time, under the belief that they must die in ten or twelve days, and thus stand a much better chance of being rescued alive. Another fact, of economic value is clearly proved by this protracted fast, viz: that as a rule man eats It is an unquestionable fact that the custom of eating three times a day, gives the various organs of the body too much work to perform, as is proven by the large quantities of material daily thrown off as excretions in health. If we could learn a lesson in this particular, much force that is now spent in getting rid of the excess of the effete material of the body, might be saved and utilized for mental labor. It is a well known fact, that large eaters seldom have superior intellects.

The most important fact proved by the fast, however, is the wonderful power of mind over matter. According to the materialistic idea, which has always been entertained by the writer, mind is simply a function of the brain; and it has been claimed, that to keep up this function, phosphates must be constantly supplied by the food.

But this man has no such supply for forty days, and yet the mind remains as clear and active throughout as at the beginning, and through the power of the Will he is enabled to control the strongest appetites and to endure the greatest physical suffering. The authorities say that mental weakness, and finally, complete insanity should have ensued; but here again they are wrong. This fact alone is of the greatest value, and points to a necessity for more careful psychological study. Dr. Tanner claims that it proves to him the immortality of the soul. Whether this be true or not it points to the probability of mind being in some way connected with some force outside, or independent of the simple physical structure of the brain.

The examination of the urine voided the first twentyfour hours after the fast, which shows that the quantity of urea thrown off was increased three-fold, is a sufficient refutation of the assertions that the fast was not honestly carried out. And when we add to this the wonderful gain in weight, in so short a time, (36 hours), we feel it useless to waste time in furnishing proofs that the doctor did abstain from food during forty days.

A calculation of the physiological results of the fast gives us the following: Amount of urine voided, 738 fluid ounces; solid matter in urine, 32 ounces; which gives us 770 ounces thrown off by the kidneys. Take from this 682 ounces of water drank, and we still have 88 ounces actual waste from the kidneys. The total loss of weight was 26 pounds, or 419 ounces; now, if we deduct the 88 ounces lost by the kidneys, we have left 328 ounces, which must have been thrown off by respiration and perspiration, chiefly as carbonic acid and water. Three hundred and twenty-eight ounces in 40 days, would give us a little more than 8 ounces per day lost by the skin and lungs, which result is as perfect as could be obtained by any of the self-constituted scientific experts.

Many of the results to be derived from this fast must be worked out by careful study of all the facts, and it is the height of presumption, to say at this early day that nothing is to be gained by science through it. The observations

to be made during the forty days following the fast, will also prove of great value, and we hope soon to be able to present all our deductions in an exact and scientific form.

It is not surprising that the profession are slow to accept the lessons taught by Dr. Tanner. History but repeats itself when the learned ones try to discredit any innovation on time-honored theories. Morse was considered crazy for attempting to establish the electric telegraph; Fields was pronounced a fool for attempting to lay an Atlantic cable; Harvey was denounced by the medical profession for demonstrating the circulation of the blood; and Morton was cast into prison for proving the value of ether as an agent to destroy the sense of pain during a surgical operation. Yet all these men lived to see their innovations adopted, and to confound their opponents with all their theories.

In the same way, Dr. Tanner is opposed by those who have long taught a false physiology. But the lessons he will yet teach the world, as well as his memory, will live long after the chief of "regular" charlatanism shall have been forgotten.

CHAPTER VII.

HUMOR OF THE FAST.

The sufferings of the faster during his long trial, and the hard deductions of fact gained to the scientific world by reason thereof, were not without occasional gleams of sunshine, pathetic incidents or broad rifts of humor. The latter, especially, were hugely enjoyed by Dr. Tanner whenever they occurred, and they served not a little to relieve the monotony of his self-imprisonment during the last hours of the fast. The former found expression in the visits of ladies, among whom were daily in attendance members of hundreds of the first-families of metropolitan society, representing its higher walks, in wealth, literature, science and the fine arts. The second was afforded by the visits of pretty children, who brought the doctor bouquets, articles of fancy, and vouthful good cheer in the way of vocal and instrumental music, or who declaimed their merry rhymes. These latter visitations were always enjoyed by the doctor, and in fact adorned the brightest page in the history of the forty days he spent in the otherwise gloomy hall.

The most curious episodes, probably, on the whole, were afforded by the appearance of skeptics, and members of the medical profession from the country. Many of the latter came long distances to satisfy their respective curiosity, or vent their skepticism, as the case might be. As a rule they were long-visaged, not a few were unkempt, and many were downright seedy in wearing apparel. Almost invariably they insisted upon boring the doctor with numberless questions, many of which were idle. The majority displayed ignorance, and it might truthfully be said, they were rude almost without exception. One man insisted upon feeling Dr. Tanner's arms and legs; another wanted to feel his pulse; a

third demanded a view of his tongue; a fourth declared food must be given to him surreptitiously, else he would be dead; a fifth wanted to search his pockets; the sixth asserted his professional reputation (sic) that there was fraud about the whole business, the seventh had some patent surgical, or other appliance, which he wished to test upon the patient; and yet another wanted to analyse even the water he used, before the faster drank it.

The effect of these boors in their constant inroads upon a fasting man, whose surrounding and conditions were not of the best, to say the least, may be easily imagined. When these fanatics were prevented by the watchers from extracting what little of life was left in the object of their devotions, their indignation took various forms of expression. As a rule they denounced the whole thing as a humbug, and every one participating as frauds. Now and then it became positively necessary, in common decency and selfrespect, to show these charlatans the way to the door, notwithstanding their protests that they had paid twenty five cents for the purpose of ventilating their empty heads. As a general thing, by Dr. Tanner's direction, the admission fee was returned to these people. Even on the thirty-ninth day when the doctor desired all the quiet he could obtain, one of these gentry, who said he was a physician from Long Island, talked so loudly that he had to be called to order, and then nothing daunted, he asked the faster to go in his enfeebled condition to the south gallery, where his writing materials were, to prepare an autograph for the applicant. The Herald reporter on watch at the time, through whom the request was made for the autograph, gave the fellow a settler by remarking, that he, as a layman, thought the first rudiments taught in the medical profession, were those of feelings of humanity.

Then the wits had their time of it. They showered in caricatures and doggerel by the barrel. None enjoyed these

more than the doctor himself. By his direction the funniest of the cartoons were pasted against the wall of the gallery in which the doctor slept and the watchers sat. Above the whole was the legend in German text, "Tanner Art Gallery," and during the closing days and hours of the fast it was a source of much attraction and a great deal of merriment to the thousands of visitors who sought the place.

VIGILANCE OF THE WATCH.

A great deal has been said by many well-meaning but ignorant persons about the efficiency or non-efficiency of the watch. A notable example of the lack of foundation for much of the speculation on the subject is found in the expression of Dr. Hammond in a Herald interview, in the course of which he remarked that "he had no doubt the watch was perfectly honest, although at times he had heard it was negligent." Some persons, even, did not claim that "they had heard" that it was negligent, but "their wish was father to the thought," (to use an old but timely simile), and they proceeded to ventilate the opinion that the watch must have been imperfectly kept. The fact is that a more thorough, complete and honest watch was never kept over a human being for any purpose, or for any length of Both schools of medicine were represented, the tours of duty were carefully scheduled, and the reliefs were promptly made. Every watcher wrote the result of his tour of duty in the record book.

The New York Herald, moreover, after the first week, established an independent watch of its own, composed of members of its City Department Staff. This watch had, as a part of its duties, to examine everything before it was handed to the doctor, and also to perform the latter act. One of them invariably accompanied the doctor on his carriage rides, and at no time, during a moment of the thirty-three days, were the eyes of a Herald reporter away from the

personality of the doctor. During the first sixteen days this auxiliary force, whose duty it was to watch the watchers, as well as Dr. Tanner, consisted of a double watch of sixteen men for each twenty-four hours. After the sixteenth day the Herald reduced its corps one-half, by shortening the respective tours of duty from eight to four hours. After this the watch was kept up with as much vigilance as before, and as remarked above, at no time, from the beginning of the fast to its close, was a Herald representative absent from the side of the faster. This bit of enterprise on the part of the Herald reassured the public in the honesty of the performance, but it was an expensive stroke, costing, as I am informed, between \$1,600 and \$1,700.

It may also be remarked here that the Neurological Society was also represented in the watch by individual members thereof, although the society, as a body, was not represented. Several gentlemen belonging to that society, with a manliness that does them credit, offered to share in the watch, even after Dr. Hammond's withdrawal of negotiations with Dr. Tanner, and notwithstanding Dr. Hammond's extraordinary vaccilation concerning the fast and Dr. Tanner's propositions anent it. These gentlemen shared in the labors and responsibilities of the watch, from beginning to end, and their records bear a proportionate share of the evidence touching its thoroughness and honesty as a whole. Many of these gentlemen did not share the views held by Dr. Landon Carter Gray, which, as a matter of record are given below:

DR. GRAY'S LETTER.

[&]quot;To the Editor of the Tribune.

[&]quot;Sir: Certain gentlemen having seen fit to place the New-York Neurological Society in an equivocal position in regard to Dr. Tanner's attempt at fasting, it becomes my duty, as the executive officer of this society, to see to it that its position in this matter is properly understood. The Neurological Society is in no way concerned in this present undertaking of Dr. Tanner's, has never had any part in it,

and so far as I am aware, will not take any share in it. Members of the society who choose to act as watchers of Dr. Tanner have an undoubted right to speak of themselves as members, but it should be distinctly remembered that they act as individuals and not by virtue of the slightest authority conferred upon them by the society. It is not just to make such unauthorized use of the name of a scientific organization of high standing.

"Some time ago it was understood that Dr. Tanner was desirous of placing himself in the hands of a committee to be appointed by the Neurological Society. Upon this committee were to be put. among others, the leading physiologists of New York, if they would consent to serve, men in whom the world, regardless of schools, would place entire confidence; and the conditions of the experiment were to be so rigid as to preclude all doubt as to the result. In this way it was hoped that if Dr. Tanner could really fast forty days, the phenomena of his fast would be thoroughly studied, and whatever scientific importance they might possess would be accurately understood. The plan was abandoned because it was soon understood that Dr. Tanner objected to the conditions as being too strict. Learning from the papers some time afterward that Dr. Tanner had had a misunderstanding about the matter with a prominent member of the society, and that he was still anxious to be tested. I wrote him. offering to call a special meeting and endeavor to have a committee appointed. In a courteous reply, he informed me that his arrangements were made at Clarendon Hall, and could not be altered, but that he would be glad to have a committee co-operate with the medical gentlemen already in charge. To this I answered that it would be impossible to get members of the Neurological Society to act conjointly with gentlemen who did not belong to the regular profession. Moreover, such a loose watch as was maintained at Clarendon Hall would satisfy no one, and conduce to nothing.

"Dr Tanner is a man of sufficient intelligence to understand that he professes to be able to do what has never been done in the history of the world; and that, in order to prove that he alone among the many millions of countless ages can fast forty days, he must subject himself to an examination as rigid and careful as human ingenuity can make it. Even then there will be skeptics. If he is not willing to submit to such a test, it is illogical on his part to complain of the doubt expressed by scientific men. Any person, well versed in sleight of hands, could feed himself or be fed with ease as the watch is now being conducted. Such prestidigitateurs as Hermann and

Houdin would grow fat in Clarendon Hall. I do not mean to express any opinion whatsoever as to Dr. Tanner's uprightness, for that would be unwarrantable; but the gentleman must remember that, hard as it may seem, a necessary assumption at the outset of his self-imposed test is that he will cheat at every turn. This assumption must be made, although we feel certain that Dr. Tanner is a sincere, enthusiastic man, come among us to demonstrate, with an honest, though it may be an irrational pride, his ability to do what no man has done before him.

"LANDON CARTER GRAY, M. D.,

"Acting President of the New-York "Neurological Society.

"Brooklyn, July 10, 1880."

Appended is the letter of Dr. Robert A. Gunn:

DR. GUNN'S REPLY.

" To the Editor of the Tribune.

"SIR: The communication of Landon Carter Gray, M. D., relative to Dr. Tanner's fast, which appeared in your issue to-day (Sunday), contains statements so at variance with the facts of the case, that justice to Dr. Tanner demands their correction.

"After referring to the original proposal, to have Dr. Tanner watched by members of the Neurological Society, which came from Dr. Hammond, and not from the Society, Dr. Gray says: 'The plan was abandoned because it was soon understood that Dr. Tanner objected to the conditions as being too strict.' The truth is, Dr. Tanner made no objections, but was anxious to have the test begin under the most rigid restrictions that Professors Dalton, Flint, and Arnold might impose upon him. He postponed his experiment several times, with the hope that Dr. Hammond would complete his arrangements with the Neurological Society. Finally, Dr. Hammond pronounced him a fraud, and the public was beginning to doubt his good intentions; so he made other arrangements and commenced his self-imposed task.

"After he began, Dr. Gray's letter was received, and his society, as well as others, was invited to participate in the experiment. It declined this fair offer, because some of the watchers did not belong to the so-called 'regular' profession, and now they assert, that such a loose watch will satisfy no one, and conduce to nothing. Certainly such a spirit does not exist among true scientists, for the real searcher after scientific facts, sinks all personality in his devotion to scientific investigation. And now, after failing to take part in the

experiment, they have no right to cast reflections, as they do, upon men who are as thoroughly educated, have had as much experience. and are certainly as honest as themselves; and who differ from them only in being independent of an arbitrary medical code of ethics, and liberal enough to believe that others may be as well informed as themselves, even though holding different opinions.

"In conclusion, I would add, that the watch has not been 'loose,' but constantly kept up by educated and earnest physicians and medical students, all of whom were entire strangers to Dr. Tanner when he began, and who would scorn to do anything having even the semblance of aiding him to perpetrate a fraud. These gentlèmen are all willing to take oath that Dr. Tanner has had no food during their respective watches, and this is verified by the chemical examinations made by Professor Van der Weyde, who is well known to the scientific world. Whatever may be the result of Dr. Tanner's fast, it is but just to him, and to the gentlemen who have watched him constantly from the first, that you give these facts a place in your valuable columns.

"New York, July 11, 1880,"

"R. A. GUNN.

CHAPTER VIII.

SIMS AND HAMMOND.

The skeptics received a severe blow when the New York evening papers of the 2d of August appeared with the following cable despatch from Dr. J. Marion Sims:

PARIS, August 2d, 1880.

DR. TANNER, Clarendon Hall, Thirteenth street, New York :-

Don't waste strength driving out. Shut off all spectators: have only your doctors and attendants. Standard telegrams republished everywhere and read by everybody. Your experiment watched here with great interest by scientists, ridiculed by fools. Hot weather is against you. Courage, brave fellow; hold on. Wish you success.

Dr. J. Marion Sims.

The feeling of incredulity among the doubters was shared by several of the leading papers, who said that the despatch was a forgery. Even the Herald threw cold water, and said in its editorial columns that it was impossible for Dr. Sims to have ever done such a thing. The latter journal caused its London correspondent to investigate the matter, and two days later, the Herald printed a cable despatch in which Dr. Sims reaffirmed all that he had expressed in the despatch which had so sorely lacerated the feelings of the Old School practitioners. The ruthless swath which was cut by this transatlantic medical scythe is probably best shown as an example in the wall sent up by Dr. Hammond when a Herald reporter visited him in relation thereto. The interview is given in all its parts, as follows:

[&]quot;Well, what can I do for the HERALD now!" said Dr. Hammond to a reporter who called upon him last evening.

[&]quot;Here is a despatch from Paris, doctor, upon which it wants your opinion."

Dr. Hammond took the message from the reporter and read it carefully over. He then burst into a hearty fit of laughter. When that was nearly over he sat down, still shaking his sides, and as soon as he could find breath he said, "Excuse me, but this is the richest thing I ever came across. It's a bold invention of the enemy. Dr. Marion Sims never sent such a despatch as that. He is a friend of mine, and if he could be guilty of cobbling such trash as that I would endeavor to forget him. No, sir, its bogus—a pure concoction, and not a good one at that. Sims send such stuff as that over the wires!" and the Doctor looked at it once more. "No, it's a fraud. These Eclectic fellows made it up here and sent it to themselves. Well, it's an apt illustration of the game."

"It came over the wires. We have verified that part of it."

"Did it? Then they sent it over to come back again, and here it is. Eclectic! Electric! And all the rest of it. Why, it reminds one of the clown in the pantomime with his everlasting giggle and his poor melancholy 'Ere we are again.' And so they are, true to their instincts. Upon my word, these chaps are beneath contempt. There may be some of them on the other side of that name, and this has been made up and sent here just to freshen things a little for the moment and arouse the dving public curiosity. It won't do. They can't make people believe that any such rubbish came from Sims. Why. here, look at the signature. He does not know his own name; and the idea that he would write himself at the bottom of a cable Dr. Marion Sims is preposterous. His name, sir, is illustrious and needs no 'doctor' before it or 'M.D.' behind it to tell it is the name of the greatest authority on women's diseases in the world. Marion Sims, of Madison Avenue, is at present in Europe on a little holiday, but he did not write that. Consequently, it came from no one and amounts to nothing."

"Is not this fast of Dr. Tanner of some value to scientific men?"

"Not the slightest. It is of no value to any one, not even to ye Eclectics. We know all about starvation. We have experimented with animals and can do so at any moment if we feel inclined, but there is no useful end to be gained. Our stock of knowledge will not be increased. Then what is the use of needless torture? This fast of Dr. Tanner is not free from doubt, and even if it were science derives no benefit from it. You may take two pigeons and starve them. One will die in a day and the other might live ten days. What then? The next two pigeons you take might both die on the second day, and all you have gained—to make a bull—is the loss of four pigeons.

"He must have suffered dreadfully." Dr. Hammond proceeded:—"I saw in the paper the other day he said he was doing it to get even with me. That's good. Fasting forty days to get even with me! Well, that's on the principle of letting the other fellow walk. I'm glad he's getting satisfaction that way. It seems to suit him. Lord, it would never do for me! By Jove! I wish my enemies—I suppose I have lots of enemies, most of us have—Well, I wish all mine would go to work and follow the example of Dr. Tanner. I like the conception, and I tell you what, if they will go in for a forty day fast—the whole lot, mind—in a bunch, and hire a hall, upon my word I don't know but that I should be inclined to supply them with cots and go in once in a while to look at them and turn them over."

"Do you offer them this opportunity, doctor?"

"I do, quite heartily. Remember, the thing must come from them and in the spirit of Dr. Tanner. I would not incite them to it for the world."

A "HERALD" VIEW.

When the despatch was verified by cable, the *Herald*, of Friday, August 7th, made these remarks:

"Dr. Marion Sims, as will be seen by our special cable despatch in another column, accepts all the responsibility for the despatch signed with his name received by Dr. Tanner a few days since and says that he sent it. This shows that at least one distinguished man has faith that the fast is real, and believes that the experiment is not without value. It also shows, or seems to show, that a man may be a great surgeon and not know what is happening all around the world—for we are inclined to the opinion that Dr. Sims would hardly have gushed so freely over Tanner if he had been nearer to But we tremble at the recollection of the awkward phrases to which two celebrated doctors have committed themselves in this affair, in evident ignorance of each other's opinions. Dr. Sims says, for instance, that Tanner's experiment is 'ridiculed only by fools,' and yet the man who has from the first most persistently ridiculed it, is Dr. W. H. Hammond. Here is a dreadful implication. Dr. Hammond says that Dr. Sims' despatch is 'trash' and that he would 'endeavor to forget' the said Sims, though he is his friend, if he could really 'cobble such trash.' How Dr. Sims may feel about the opinion his friend Hammond has of his style we shall know later, as also how Dr. Hammond feels over the opinion of his intellect delivered by Sims."

A CHANGE OF SENTIMENT.

In striking contrast with the fit of ebulition which marked Dr. Hammond's spirits when the *Herald* reporter called upon him, is the following from the same high medical potentate a few days later, when it became evident that Dr. Tanner was destined to successfully complete his task:

"43 West 54th Street,"
New York, Aug., 4, 1880.

- "Dear Doctor—In anwer to your request for an expression of my opinion to you relative to some of the circumstances of Dr. Tanner's fast, I have to say:
- "First—That I think the watching has been honestly conducted, although at times, as I have understood, it may have been negligent.
- "Second—That I believe he has faithfully abstained from all food but water.
 - "Third—That he has succeeded far better than I thought he would.
- "Fourth—That, though there have been other alleged fasts of long duration and some even longer, his is better authenticated than any other of similar period.
- "Fifth—That he has not succeeded in showing that his organism is differently constituted from any other, for he has suffered as others would have suffered under like deprivation.
- "Sixth—That he has shown that alleged instances of fasting a month or more without the symptoms of inanition being produced are fraudulent or otherwise deceptive. This is the most important result, probably, of his trial.
- "Seventh—That he has shown the inability of the human race to go for any considerable period without water, confirming, therefore, our previous knowledge on the subject.
- "Eighth—That he has shown great pluck, determination and endurance, and that these qualities in him command my sincere admiration.
- "Ninth—That I think he ought to stop at once and occupy the remainder of the forty days in trying to put his stomach in suitable condition to receive that watermelon on Saturday.
- "Tenth—That further perseverance in the face of the serious dangers that now menace him would, to my mind, be due to false pride. I am entirely willing to concede that he can go forty days without other food than water.
- "Eleventh—In a letter which I received from him a few days before he entered on his present fast, he informed me that if he succeeded he

would in the Fall, accept my proposition to go thirty days without any food, water including. My offer is still open to him, but I hope for his own sake that he will not accept it. His present victory ought to satisfy him. Still of that he must be the judge; I am ready for the test.

"Twelfth—That I think the investigations made of Dr. Tanner during his fast have been superficial and restricted. The amount and character of the exhalations from the skin and lungs ought especially to have been analysed. The weighing seems to have been very imperfectly performed.

"Thirteenth—That therefore the scientific results are not what they should have been, but that, nevertheless, enough has been shown to cause us to modify our views in regard to the effects of inanition on the human body.

"Yours sincerely,

"WILLIAM A. HAMMOND.

"DR. EMIL HORBER."

One more word about Dr. Hammond's consistency. When arrangements for the fast were under way, Dr. Hammond said that he himself mailed the letter, dated June 1st, to Dr. Tanner, proposing to call a special meeting of the Neurological Society, and which Dr. Tanner did not receive till June 19th. In an interview printed in the Herald at the close of the fast, this self-same Dr. Hammond positively asserts, that the letter in question was entrusted to his son, and that the latter put it in his pocket, and forgot for several days to mail it. These two opposite assertions from the lips of the same man are allowed to stand by themselves. They carry their own comment.



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